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The American Artisan
AND HARDWARE RECORD

Vol. 50. No. 7. CHICAGO, AUGUST 19, 1905. $2.00 Per Year.

BOMMER SPRING HINGES
(ESTABL. 1876.)
ARE THE BEST
BOMMER BROTHERS, MF'RS. 256 to 276 CLASSON AVE. BROOKLYN, N.Y.

Bolts, Carriage Forgings, Etc.

Catalog and Prices on Application

COLUMBUS BOLT WORKS, Columbus, Ohio.

"NIAGARA"

CHAINS
ONEIDA COMMUNITY

This Space for Sale. Inquire of Daniel Stern, 69 Dearborn St., Chicago.

WE MAKE

Stove, Tire and Carriage Bolts—Rods, Rivets, Machine Screws, Nuts, Hinge Pins and Special Bolts, Screws and Nuts of all descriptions

THE ATLAS BOLT & SCREW CO.
Cleveland, O.

Always On Top

Any weak spot in your roofs should be attended to now. A leaky roof can cause an immense loss on short notice. American Seal Elastic Oil Cement is sure cure. If your roof is old and cannot be soldered this is the one thing to use. American Seal Roof Paints, Metallic and Graphite, preserve and protect. None better, none just as good. Prices are right even if the quality is the very best.

Agencies:
THE PERKINS ROOFING & SUPPLY CO. 235 Lake St., CHICAGO, ILL.
STOCKHOFF SUPPLY CO., 107 N. Main St., ST. LOUIS, MO.

BLACK DIAMOND FILES and RASPS

TRADE MARK
PERFECT—ALWAYS

Twelve Medals Awarded at International Expositions
Copy of Catalogue will be sent free to any interested file user upon application.

G. & H. BARNETT COMPANY
Black Diamond File Works PHILADELPHIA

"BROWN"
TIE-OUT CHAINS

Fitted with Stake Ring, a Swivel every ten feet, and a Swivel Snap.

A FREE SAMPLE WILL TELL THE STORY.

The BRIDGEPORT CHAIN CO.
BRIDGEPORT, CONN.

There are a lot of Stove Dealers

Making 50% Profit

on

Our Steel Ranges

They Pay $18.00 and Sell for $27.00
" " 20.00 " " " 30.00
" " 24.00 " " " 35.00

Above prices include High Closets

THE WAY THEY ARE BUILT MAKES THEM GOOD

Planished Steel Outside Body.
Decarbonized Steel Inner Body.
Asbestos Mill Board Between Bodies.
14-Ga. Steel Plate Ovens.

All Joints Gasket Packed. Duplex Grates.
Power Riveted. Ovens 13½-in. high; take 26-in. wood

FIRE-BOX LININGS ARE ABSOLUTELY THE MOST DURABLE MADE

PITTSBURGH STOVE & RANGE CO., Pittsburgh, Pa.

Western Agency: W. D. SAGER, 38 to 40 Michigan St., Chicago, Ill.

The RIVAL CLERMONT STEEL RANGE

is good looking—it's a beauty—but appearance was not our primary object in designing it. It is first of all a strong range — durable, reliable, convenient. It is made more to *cook* than to *look*. It is economical both as regards original and future costs. Ask us more.

GEM CITY STOVE CO.
DAYTON, OHIO

Mfrs. The Clermont Air Tight Hot Blast and many other Oaks and Stoves and Ranges

TRADE MARK
BROTHERS
UNDERSELL ALL OTHERS

WHEN YOU COME TO TOWN, SEE US ABOUT OUR GREEN SHEET BARGAIN BULLETINS, FOR YOUR BARGAIN DEPARTMENT.

¶ We have made a study of this proposition, and have interesting bargains to offer at all times.

¶ The advantages of a properly conducted BARGAIN DEPARTMENT, are many. It is the strong factor with the most successful and progressive stores of today.

¶ Besides the most complete stock of BARGAIN MERCHANDISE, we have many suggestions that will greatly aid you in establishing and successfully operating this department.

¶ Our Daily Department Display of Trade-Booming Bargains for special sales or bargain counters is a feature in itself.

¶ Our Great Mercantile Establishment is the most centrally located in Chicago--within a few minutes walk of all principal Hotels, Depots and Docks

¶ Call and see us when in the market.

LYON BROTHERS

Largest Wholesalers of General Merchandise in America

Madison, Market and Monroe Streets
CHICAGO, ∴ ILLINOIS

DIAMOND ST. CLAIR—High Grade Cast Cook Stove.

Incandescent ST. CLAIR Oak

"ST. CLAIR"

Stoves and Ranges

Write for our New 1905-6 Catalogue

Just Issued.

ALMEDA—for wood, with lift-up top feed

LIVE OAK

BELLEVILLE STOVE WORKS, Belleville, Illinois.

The following agencies carry a full line of our goods in stock for distribution:

KELLOGG & STOKES STOVE CO., Denver, Colo.
For Colorado, Wyoming and New Mexico.

POWELL & SMITH, Tacoma, Wash.
For Western Washington, Alaska and British Columbia.

BELLEVILLE STOVE WORKS, Kansas City, Mo.
For Kansas City, Western Missouri and Kansas.

JOHN KONTNY, 65-67 N. Desplaines St., Chicago.
For Northern Illinois, Wisconsin and Minnesota.

M TRADE MARK

Moore's Stoves Always Please

"IT SHOWS IN THE FINISH"

1905 Base Burner

Looking for Quality

¶ There is much of your reputation as a Stove Dealer that comes from the *quality* of the Base Burner which you sell. It is the Highest Grade Stove in general use, and often to the buyer, is the most important and costly piece of furniture in his house. It should be a perfect stove, *dependable* and *satisfactory* in every way; if not, your reputation suffers.

¶ We pledge you our reputation that Moore's Base Burners are right and dependable, and, in addition, they have that correct appearance which is so absolutely essential in attracting the eye of the buyer and clinching a sale.

¶ *Are you looking* for a better line of Base Burners for your 1905 trade? If so, let us know it early. We are placing agencies *now*.

THE EASY LINE TO SELL.

JOLIET STOVE WORKS, : : Joliet, Illinois.

No. 10 New Process Oil Heater.

Boston Agents:
PRESCOTT & CO., 27 Dock Sq.

Philadelphia Agents:
118 North 2nd Street

"NEW PROCESS" and "STANDARD" OIL HEATERS are the most successful and easiest selling line on the market.

You will serve your own best interests by writing for catalogue and agency terms on these goods to-day as the selling season will soon be at hand.

Standard Lighting Co., Div.
AMERICAN STOVE CO.
CLEVELAND, OHIO

The COOK *of* KOKOMO

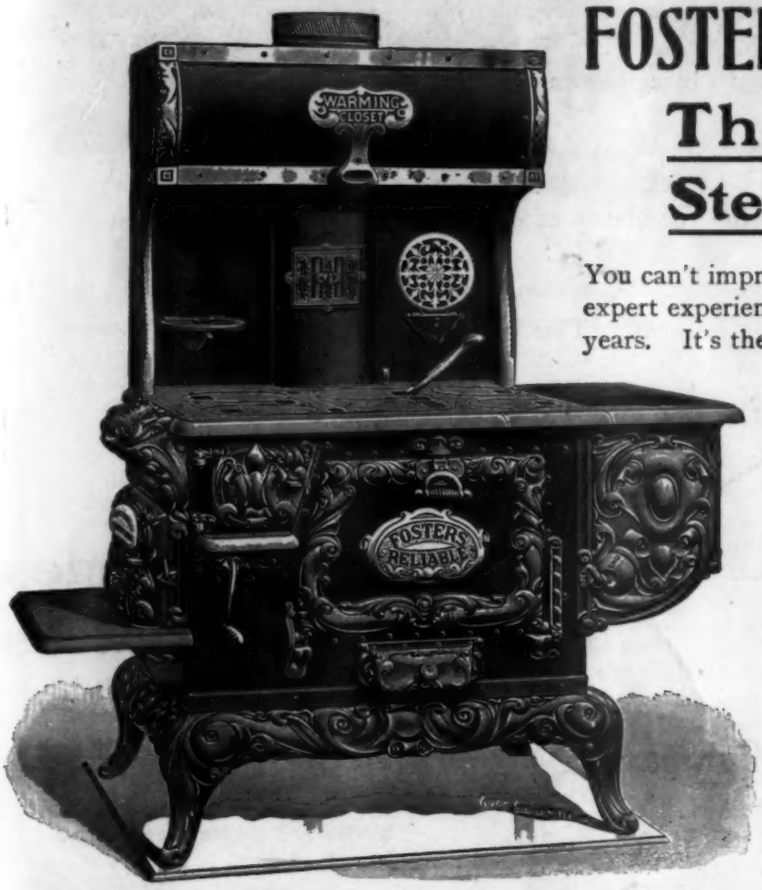
The Latest Addition Globe Cast Cook

MADE IN KOKOMO

The New Globe Cast Cook has not been on the market very long, but the rigid, exacting tests, conducted before its birth was announced, gave evidence of the great approval to follow. We now say without hesitation that the Globe Cast Cook is the best of its kind ever offered for sale. It bakes quickly and evenly. It throws off little heat, consumes little fuel. It is built as a stove should be built—practically, honestly, solidly. When it comes to durability, the Globe Cast Cook resembles Gibraltar. Neither you, nor we, nor the user can speak too highly of its merits. It's like the whole Globe Line.

GLOBE STOVE & RANGE CO.

KOKOMO, INDIANA



FOSTER'S RELIABLE

The Latest Steel Range

You can't improve on it. It's the triumph of expert experience extending over a great many years. It's the best that money can buy, and you don't need so much money either. Its many friends are satisfied that it meets the wants of customers in a most gratifying manner, creating absolute satisfaction, bringing happiness to both buyer and seller.

May We Send Our Catalogs?

The Foster Stove Co.
IRONTON, OHIO

The Merits and The Price of this

Square Oven Cast Range

With

New, Handsome, Steel High Closet

will win more trade and longer friends than a cheap steel range at any price.

Ask for Information.

THE PORTSMOUTH STOVE & RANGE CO.
PORTSMOUTH, OHIO

MORLEY BROTHERS, Saginaw, Mich., Wholesale Agents for Michigan

THE BUSIEST MAKERS OF STOVES & RANGES IN THE WORLD

The Trade Winning Line,—consumers are being shown the merits of our line and will follow the dealer who shows himself awake by the confidence of customers seeking the very latest the success of the season, possessing the most attractive features. This is

The Cahoone Anti-Smoke Stoves, Ranges & Heaters

Get the booklet "15 Reasons"—illustrated.

The Cahoone Company
41 Park Row, N. Y.

THE MONITOR BASE BURNER

The Monitor Base Burner for Hard Coal.

The quickest room-heater on the market. With its front flue construction, the heat is carried to the front of the stove, down across the entire bottom, then up the back, thus forcing it to cover the greatest amount of heating surface, before allowing it to pass out the pipe. This construction (on which we own exclusive patents) cuts down the fuel bill. The heat is distributed in the house, and not sent out the chimney.

With its many new improvements, its new trimmings of special beauty, it is a better seller than ever before. Thousands of them are in use. Our plated work has been brought to the highest grade of perfection.

Write for complete catalogue and discounts.

MANUFACTURED BY

THE WM. RESOR & CO.

Established 1819 **CINCINNATI, O.** Incorporated 1899

M
TRADE MARK

Moore's Stoves Always Please

MOORE'S Air-Tight Heater

A STANDBY

The **Everlasting Fire-Pot**

¶ Fourteen years of continuously increasing popularity has made Moore's Air-Tight Heater a standby in thousands of homes, and its reputation is still young.

¶ This remarkable design and construction is one of those successful combinations that is so nearly right that it never grows old. It stands alone among stove patterns with a style of its own—a style that is so good that it lasts and the more you see it the better you like it.

¶ The Everlasting Fire-Pot used in Moore's Air-Tight Heater, with its gas consuming side inlets, burns up everything but the ashes and is practically indestructible. We shall be glad to talk over with you this and many other points which have helped to make Moore's Air-Tight Heater a leader in THE EASY LINE TO SELL.

JOLIET STOVE WORKS, Joliet, Illinois.

95

VAN'S RANGE

Patent Improved Wrought Steel Portable

For Hotels, Restaurants. Public Institutions, Boarding Houses, and Private Families. All kinds of Hotel Implements for culinary purposes. Manufactured and for sale by

The John Van Range Company

Southwest Corner
5th and Broadway

CINCINNATI, - - - - - OHIO

Here's a Hot Weather Snap for Wide-Awake Range Dealers

I am going to sell 1000 400 lb. six hole steel ranges finished in Japan for

$15.00 Each

just to keep my boys out of trouble during the hot weather by keeping my foundry running full blast. I'll sell the ranges too, so you'd better get in line and ORDER NOW.

These ranges formerly retailed at $60. each. Send me a carload order and get my best cash discount or I'll give dating to firms with satisfactory credit. What better proposition can you ask for, if you have a little capital, are sufficiently enterprising, and want to make money?

DO YOU KNOW there is a big demand for the "Willard" Steel Ranges because they give perfect satisfaction, and don't cost too much? Then why don't you supply them? I would much rather sell to a good hustling dealer than direct to the consumer.

WILLARD STEEL RANGES

are advertised in many leading publications, and the people know them and want them. Get my prices — it means profits—DOLLARS—to you. Every sale leads to another. I can sell you a better range than you can buy ANYWHERE for the money, one that cooks well and bakes evenly and perfectly, and will last a life time, with proper care. Tell me how many ranges you can sell annually and I will make you a very interesting proposition.

AGENTS WANTED

WM. G. WILLARD, Room No. 28 Willard Bldg., 316 CHESTNUT STREET, **ST. LOUIS, MO.**

ASSORTED PACKAGES

Put up expressly for the Retail Trade

ONE POUND—4 SIZES—¼ lb. each size.

North Carolina, **$3.10**
Wyoming, - **2.65**

4½ x 6	2½ x 3
2¾ x 3¼	2 x 5

TWO POUND—8 SIZES—¼ lb. each size.

North Carolina, **$6.00**
Wyoming, - **5.10**

2 x 3	2¼ x 3½
2 x 4	2½ x 3
3 x 3	2½ x 5
3 x 4½	4½ x 6½

THREE POUND—12 SIZES

¼ lb. each size.

North Carolina, **$8.50**
Wyoming, - **7.30**

4½ x 5	2¼ x 3¾
2¾ x 4½	2 x 4
3 x 3	2¾ x 2¾
2½ x 3	5 x 6
2 x 3	2½ x 5
2 x 4½	2¼ x 3¼

ABOVE PRICES NET. NO DISCOUNT.

CHICAGO **EUGENE MUNSELL & CO.** NEW YORK

SAVE HALF YOUR FUEL

by using the

ROCHESTER RADIATOR

The Part that Does the Business

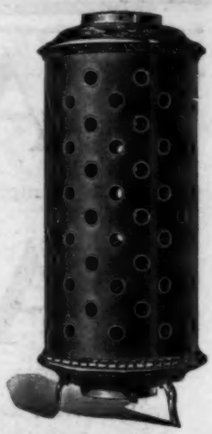
Satisfaction guaranteed or money refunded.
Over 100,000 of them in use.
Fits any stove or furnace.
For Hard or Soft Coal, Wood or Gas.
Price from $2.00 to $12.00.

One square inch of radiating surface directly over the hot current is better than six in a drum or side heater with perpendicular tubes.

Easily cleaned. We guarantee our radiators not to interfere with, or choke the draught.

Write for descriptive catalogue and prices.

ROCHESTER RADIATOR CO. 120 Furnace Street ROCHESTER, N.Y



WHEN a logger places a wedge in a log and hits it a blow he does not know how much of a split the effort will make, but he does know that if he continues to hit the wedge the log will soon lie in twain. The driving wedge to business is advertising. You cannot expect to make your success with a single ad, no matter how large. Continual rapping does it.

WHY DON'T YOU HANDLE OUR "HOWE" VENTILATOR?

Note the Handsome Appearance

IT IS THE ONLY stove that brings a large and constant stream of fresh air into a house, warming this air by passing it through and over portions of the stove, which never becomes red hot, thus preserving all the oxygen or life-giving element.

IT IS THE ONLY stove that takes a large and constant stream of foul and cold air off of the floors and out through the chimney.

IT IS THE ONLY stove that equalizes the temperature in a large room so that by actual tests a variation of only from 2 to 5 degrees is shown in thermometers hung at the floor and ceiling. The variation when any other stove than the Howe Ventilator is used is from 30 to 45 degrees.

Send for our booklet, "HOW TO LIVE AN IN-DOOR LIFE." A souvenir booklet on the "Howe" Ventilator, describing in detail its **construction**, its **principle**, its **quality** and the **benefits** derived **from its use.**

IF YOUR TRADE demands GOOD GOODS—WE have THEM.

Our Western Agents
Cook & Van Evera Co., : : Chicago, Ill.

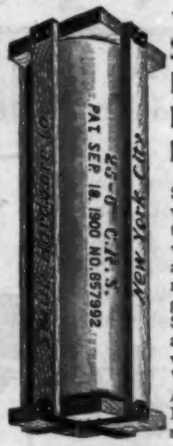
Galusha Stove Co.
Rochester, N. Y.

IDEAL FURNACES

Always please the purchaser.
Have great heating capacity.
Burns soft or hard coal or coke.
Large and heavy fire pot.
Gives more heat, with less fuel, than others.
Requires but little attention.
If you want more information about this furnace, write to

THE H. P. DEUSCHER CO.,
HAMILTON, OHIO.

ALL ABOARD



with
SMITH'S Latest Improved Double Lock Nested Stove Pipe

Shipped in special wooden crates, containing 25 joints, when desired. Pipe and Elbows are furnished in four grades: Cold Rolled Steel, which is standard grade, Wellsville Polished, Wood's Refined and American Russia or Planished. Automatic lock joints.

Free model showing how it locks, on request.

The Ohio Stove Pipe & Mfg. Co.
New Philadelphia, Ohio

Smith's Hot Water Specialties can be used in hundreds of jobs where the Furnace is either working poorly,—or is overloaded. We make Hot Water Attachments to fit any Warm Air Furnace or Heater,—and the capacities range all the way from a 30 gallon tank up to carrying 1,000 ft. of radiation.

Our interesting little booklet and prices for the asking.

Chas. Smith Co.
103 Lake St., CHICAGO, ILL.
Omaha Stove Repair Works.
Western Agents

THAT PAPER IS THE CHEAPEST WHICH BRINGS THE BEST RESULTS IN PROPORTION TO ITS RATE, NO MATTER WHAT THAT RATE MAY BE.

TRIUMPH
HOT AIR FURNACES

Are Made in
MANY STYLES
and in
MANY SIZES

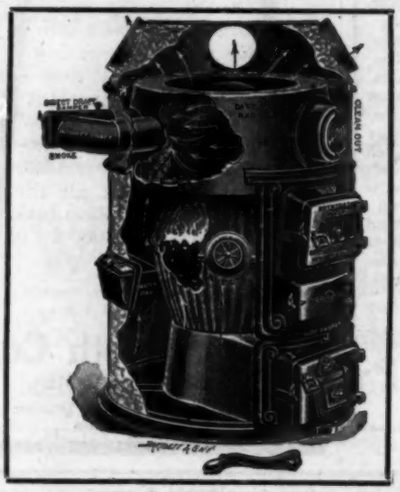
JOHN KONTNY, Western Agent
65-67 N. Desplaines St., CHICAGO

THE CRAIG-REYNOLDS FDY. CO.
DAYTON, OHIO

Mfrs. Triumph Furnaces, Triumph Hot Water and Triumph Steam Heaters

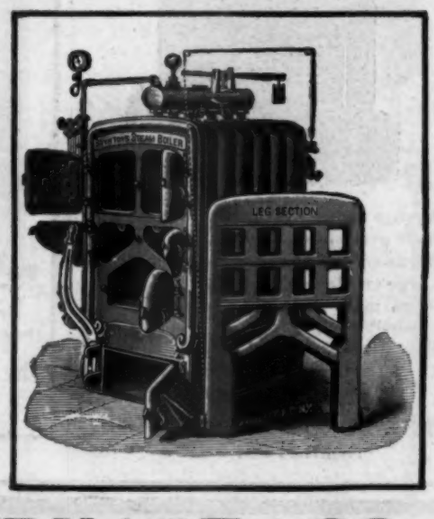
THE NAME
BOYNTON

has an established value when applied to
Furnaces, Steam and Hot Water Heaters.



This has been gained by years of honest value — by giving in 1849, 1860, 1870, 1880, 1890, 1900, 1905 the best heating apparatus made at that time. Our customers know that we keep abreast of the times and are always first in the field with every real improvement.

WRITE US FOR CATALOGUE



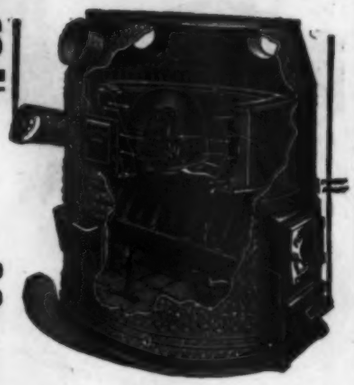
The BOYNTON FURNACE CO.
147-149 Lake St., CHICAGO **207-209 Water St., NEW YORK**

Floral City Furnaces

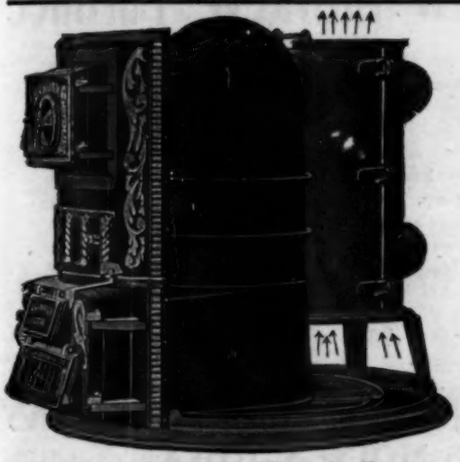
Are strictly up-to-date, old patterns have been relegated to the scrap heap, old methods discarded, but they are in no sense experiments.

EVERY FURNACE IS TIME TRIED AND HAS BEEN THOROUGHLY TESTED

in a climate where the temperature often falls to 40° and 50° below zero. Write for catalogue.



Monroe Foundry & Furnace Co., Monroe, Mich.



The Crown, Low Down, Warm Air Furnace

"Went Like a Good Looking Girl"

That's the way one dealer described his sales on a shipment of

Crown Low Down Furnaces

sent him last fall. We receive lots of letters like this. Our customers are all enthusiastic. It will pay you to look into the matter. Get our latest furnace book.

March-Brownback Stove Co.
POTTSTOWN, PA.

EMPEROR FURNACES

FOR WOOD

SIMPLE SAFE DURABLE

ECONOMICAL IN FUEL

The Best and Cheapest Line of Wood Furnaces.
Furnished for either Brick or Galvanized Iron Casing.

BERGSTROM STOVE CO.

Send for Catalogue NEENAH, WIS.

Wise People

buy

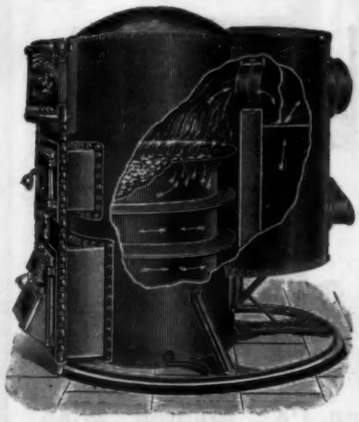
Wise Furnaces

Manufactured by

The Wise Furnace Co.

Akron, Ohio.

Catalogue and discounts sent on application.



WEIR ALL-STEEL GAS AND SMOKE CONSUMING FURNACE

It's a good plan to know all about the best furnace on the market.

Write and we'll tell you.

MEYER FURNACE CO.

PEORIA, ILLINOIS.

"THE HANDY FURNACE PIPE"

ABSOLUTELY SAFE

The saving of labor in putting it up makes it the cheapest hot air pipe in the market.

Write for catalog.

F. MEYER & BRO. CO.

PEORIA, ILLINOIS.

Green's New Hawkeye Furnace

is made especially for those dealers who are looking for a substantial, well built furnace that they can unreservedly guarantee to their customers, and yet one that they can install at a competitive price and still make a good clean profit. We want you to notice the short feed chute which makes such an unusually large air space at the back. Nine inch round diving flue which is not apt to clog up. Convenient and effective clean out. Extraordinarily large ash pit. Triangular revolving grates. These special features make the Hawkeye an easy furnace to sell and, when combined with the price it makes a combination that will defy competition. You can tell by the construction that it cannot help giving satisfaction it you give it half a chance. We have two sizes ready for shipment and will be glad to quote you prices.

GREEN FOUNDRY & FURNACE WORKS

DES MOINES, IOWA

"COMING EVENTS"

Not in several years has the outlook been brighter for a very heavy Fall Rush.

Perhaps this Rush is local with the KELSEY WARM AIR GENERATOR, but that isn't the point.

We want to impress upon Heating men in unoccupied KELSEY territory that *now* is the time to ask for the KELSEY AGENCY, that *now* is the time to place a sample KELSEY GENERATOR on the Sample Floor, and that *now* is the time to anticipate your wants for the next three months —if you want KELSEY GENERATORS for your better class of Heating Work.

It's very evident the KELSEY is more popular, and that KELSEY Agents are making more sales than ever before.

Want Our Exclusive AGENCY Proposition?

"There's Only One Warm Air GENERATOR."

KELSEY HEATING CO., SYRACUSE, N. Y.

New York City: 156 FIFTH AVENUE
Philadelphia: Builders' Exchange, 24 S. 7th St.
JAMES SMART MFG. CO., Brockville, Ont., Sole Makers for Canada.
Western Sales Agents: COOK & VAN EVERA COMPANY 38 East Lake Street, CHICAGO

Reduced Railroad Rates for Merchants

The Chicago Commercial Association has secured reduced rates to Chicago for its members, merchants and manufacturers who are patrons of its members, on the dates which follow:

WESTERN PASSENGER ASSOCIATION TERRITORY

Rates of one and one-fifth fare on the certificate plan have been granted from points in Iowa, Wisconsin, Nebraska, Colorado, New Mexico, on the Atchison, Topeka and Santa Fe proper; New Mexico and Arizona on the Santa Fe Pacific; Wyoming (from Cheyenne only); also in Minnesota and North and South Dakota, except on the Soo System, and members on this line can secure the reduced rates from the nearest points on other lines; Illinois, Missouri and Kansas in Western Passenger Association Territory, and Northern Peninsula of Michigan.

First Meeting—Purchasing dates, July 15 to 22. Return dates, July 19 to August 1.

Second Meeting—Purchasing dates, August 5 to 12. Return dates, August 9 to 22.

Third Meeting—Purchasing dates, August 19 to 26. Return dates, August 23 to Sept. 5.

Fourth Meeting—Purchasing dates, Sept. 2 to 9. Return dates, Sept. 6 to 19.

Fifth Meeting—Purchasing dates, Oct. 28 to Nov. 4. Return dates, Nov. 1 to 14.

SOUTHWESTERN POINTS

Rates of one and one-fifth fare on certificate plan have been granted by the Atchison, Topeka and Santa Fe System, east of and including Arizona and New Mexico; Chicago, Rock Island and Pacific; Chicago, Rock Island and Gulf; Kansas City, Clinton and Springfield; Missouri Pacific-Iron Mountain System; St. Louis and San Francisco; Kansas City Southern; El Paso and Northeastern System; Gulf, Colorado and Santa Fe; Missouri, Kansas and Texas System; International and Great Northern, for the same dates as from Western Passenger Association territory.

CENTRAL PASSENGER ASSOCIATION TERRITORY

This is the territory east of Chicago as far as Buffalo and Pittsburg and north of the Ohio river.

First Meeting—Purchasing dates, August 5 to 11. Return dates, August 9 to 11.

Second Meeting—Purchasing dates, August 19 to 25. Return dates, August 23 to Sept. 2.

Third Meeting—Purchasing dates, Sept. 2 to Sept. 8. Return dates, Sept. 6 to 16.

Fourth Meeting—Purchasing dates, Oct. 28 to Nov. 3. Return dates, Nov. 1 to 11.

The rate from this territory will be a fare and a third for the round trip.

HOW TO OBTAIN THE RATE

Purchasers of tickets must in all cases take certificates (not a receipt) from the ticket seller at the point of starting. Upon arriving in Chicago communicate at once with THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, or with the merchant with whom you may be doing business or may desire to do business.

The certificate receipt, which the purchaser must ask for and obtain in all cases from the ticket agent when he buys his going ticket, must also be presented to the association secretary, in connection with the membership card which should be obtained from some member of the association in Chicago, who, if everything is correct, will endorse such certificate, and it will then be turned over to the joint agent of the railway companies for his endorsement. The certificate so endorsed will then permit the holder, upon presentation to the ticket agent at Chicago, of the railway lines over which the member travels, to obtain his return ticket for one-third or one-fifth the one-way fare.

To avoid delay and confusion in the rush to make trains, deposit your ticket with the secretary upon your arrival in Chicago.

Only retail merchants, manufacturers and bankers, in good standing, are entitled to the rate privilege.

SPECIAL RATES

ILLINOIS CENTRAL AND THE SOUTH

The Illinois Central will make a rate of about a fare and a third for the round trip between June 1 and Sept. 30, bearing final return limit to Oct. 31, from all points in Tennessee, Mississippi and Louisiana.

FROM THE PACIFIC COAST

The Southern Pacific will make a rate from San Francisco, Los Angeles, Colton and Redding and intermediate points of $72.50 for the round trip to Chicago on July 4, 5, 6 and 24, 25 and 26, ensuing.

Lion Combination Furnace

During the quarter of a century that we have been making furnaces, our products have satisfied so many customers that we let **their** commendation speak for us.

Write for Catalog.

The Youngstown Furnace Co.

YOUNGSTOWN, OHIO.

FUEL ECONOMY GUARANTEED
VACUUM STEAM HEATING SYSTEM
Morgan & Co. Chicago.

Robinson Crescent Furnace

FOR HARD COAL, SOFT COAL OR WOOD

Put to test last year. Its popularity has been fully demonstrated. : : :

This furnace is supplied with our CELEBRATED ECLIPSE GRATE two-piece Fire Pot, large Ashpit, Double Feed Doors and Crescent Flue Radiator.

ROBINSON FURNACE CO., 107 Lake St., CHICAGO

THERE IS NO OTHER FURNACE

that contains as much direct HEATING SURFACE, or that is as Powerful, Durable and and Economical as the Double Radiator, All Cast

MUELLER

Agents for MUELLER furnaces in all parts of the Country are getting the cream of the furnace heating business in their vicinity. They get good prices for the jobs they install, because with the MUELLER they are offering more than their competitors.

You can have the agency for your town if we are not already represented there. Better act quick, or your competitor will get ahead of you.

L. J. MUELLER FURNACE CO.

ESTABLISHED 1857

191 Reed Street, - - - - - - MILWAUKEE, WIS.

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Ventilating School Room Heater

for Township Schools.

Superior to any made in this country.

THE MONARCH FURNACE,

made of heavy annealed steel, has a very large radiating surface, has our patent revolving grate, is easy to operate; is absolutely gas and dust tight, and manufactured by

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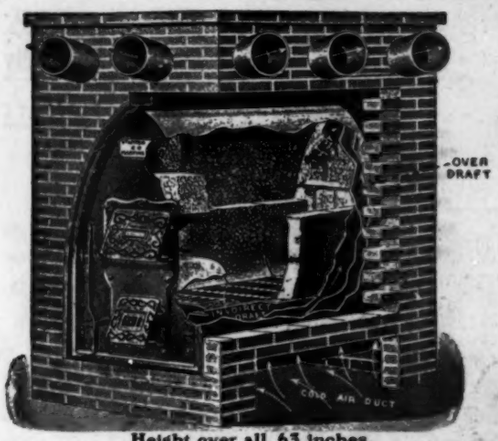

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There is no money in handling cheap Furnaces. They are sold on price alone, and not on merit. The STANTON SEAMLESS STEEL FURNACE has been on the market for ten years, and many of them in use for that length of time without repairs, and still good.

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INFORMATION FREE
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MONCRIEF
WARM AIR FURNACE.
Specialties
All Cast Iron.
Moncrief Duplex Grate.
Large Radiating Surface.
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Top Return Flue.
Simplicity, Durability, Economy.
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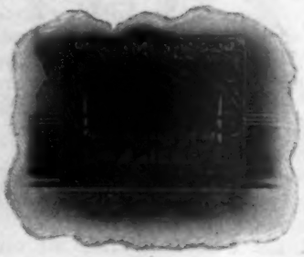

The handsomest design. The largest air capacity. The cleanest, the easiest to operate. The cheapest, quality and utility considered. Valve operated by foot. No burning of hand opening or closing valve. Valve held at any point by compression springs. As easily attached as a common register.

A Sample order will prove truth of above statements.

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are heavy, plain and effective. No "clean outs." Grate and Radiating surface large. Been under severe test 5 years. Catalog explains all about it. Write us. Special prices for 1905.

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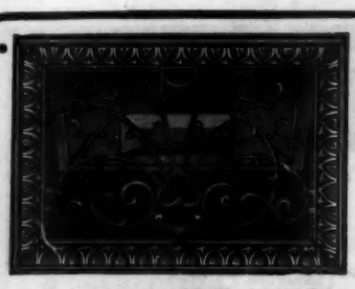

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We also make a complete line of Floor Registers. GET OUR PRICES.

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Manufacturers of
MONITOR FURNACES and COMBINATION HEATERS, REGISTERS, FURNACE PIPE and FITTINGS.

AS EASY TO SET AS A STOVE

A steel furnace with a record of sales from Canada to Texas and from Denver to Pittsburg. Riveted like a boiler, dust proof and gas tight.

So simple to install that the dealer need not be an expert furnace man. We plan the job when asked.

Are easy for the householder to manage. No packed joints.

Fire pot is in sections enclosed within the gas-tight steel dome; inexpensive to remove.

Indirect radiator with diving flue and indirect draft gives long smoke travel and doubles radiating capacity of furnace.

We advertise for the dealer. Send for our Forty - Page Catalog.

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Manufacturers
MARSHALLTOWN, IOWA

Chas. Lusted, Sr., La Fayette, Iowa, writes: "THE AMERICAN ARTISAN is the inventor's friend."

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The Proper Kind of Air

The most eminent authorities agree that warm air should be moistened—if you wish healthful heating that also gives maxium comfort.

The only efficient way to secure moist, warm air is with the WATERLOO Side Wall Register.

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The warmer the air, the greater evaporation—and the combination of warm air and moisture is always uniform.

The Water Pan is accessable, and easily removed for filling.

We have a little booklet that tells our story in detail—*and we'll send it with our prices on request.*

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WE MAKE ALL LINES

All Cast
Modified Steel
All Steel

Quality everlastingly the best
Prices everlastingly the bottom

OUR { **ALL CAST** Are time tried and worth proven.
MODIFIED STEEL The novelty success of 1904.
ALL STEEL Orders accepted for September delivery.

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DOVER PATENT NESTED STOVE PIPE

Guaranteed to be the Most Practical Stove Pipe on the Market.

All rolls are wrapped in paper and labeled, giving size.

25 joints shipped in a wooden crate.

Requires no tools to put it together and can be re-shipped to your customers in original package.

Also Manufacturers of
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HANDY NESTED STOVE PIPE T JOINT

Saves 90 per cent of room.
Saves 75 per cent of freight
Does not damage in shipping.
Is stronger and neater than a hand made riveted T.
Is always ready for use.
Fastens together with two bolts.
Is a perfect fitting joint.

Never the rusty and unsightly T Joint usually offered for sale. Always neat, clean and salable. Packed ten 12-inch joints in a crate 7x8 inches and 14 inches long. Weighing 15 pounds. Made in Common, Polished Blue Steel and Planished Iron.

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Furnace Makers

to increase their profits

An All-Steel Casing Ring.

unbreakable, perfect in circles, always the same in diameter and circumference; made to your own sizes; for single or double casings.

WRITE AT ONCE

The Walworth Run Foundry Co.

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Do you know why "the horseshoe" furnace is expensive? Do you know why it is not up-to-date? Do you know why our new

Radium Furnace

is better in a hundred ways? We'll give you just one reason,—you'll hear about the others from week to week.

You know the feed door gets mighty hot with "the horseshoe" furnace. You know it radiates a lot of heat into the room instead of into the hot air pipes. You know that the products of combustion are sent around the two front return bends and only about one-third of the way around the circumference of the large radiator.—You know all that. Do you know that science has triumphed over these disadvantages and has turned out the latest, the most economical, the most satisfactory furnace — the **Gilt Edge Radium?**

R. J. Schwab & Sons Co.

The Furnace Men

Milwaukee, - Wisconsin

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so claimed,
in the way of heating
stoves, and the
approach of cold weather, it
cannot be out
of place to remind our
customers that
in the Genuine Round Oak
they have
absolutely the best
heating stove,
for any kind of fuel,
ever known in the
stove business.
In durability, heat-giving,
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it surpasses all others.
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mean that
in the agency for the
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Push its sale—
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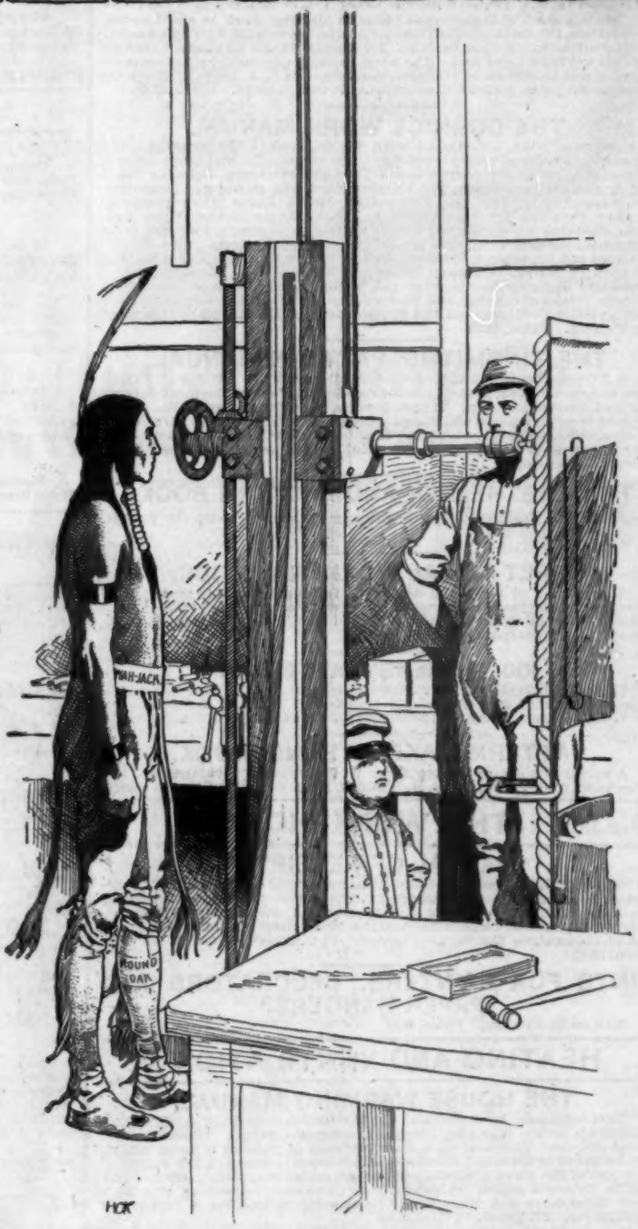

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MAKERS OF GOOD GOODS ONLY

ESTABLISHED 1880.

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Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

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69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.
THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, AUGUST 19, 1905.

Sophistry.

FROM the times of Protagorus and the Sophists down to the present, ever and anon some of our incorrigible band of mortals attempt to "make the worse appear the better reason," to distort truth, and prove that black is white. Socrates wisely and brilliantly opened up the lime-light upon these false logicians, revealing them in their true color, showing that whatever the frailties of language and however impotent the human mind, there were certain almighty facts which should and must be true and which are confirmed by certain intuitions and sensibilities superior to any syllogism however adroitly construed.

It is with the greatest regret that we call attention to an apparent attempt at sophistry by our contemporary, the National Hardware Bulletin, published by and official organ of the National Retail Hardware Association. The following communication was received on the subject:

To THE AMERICAN ARTISAN:

Agreeable to my promise the other day, I am sending you the July issue of the National Hardware Bulletin. As I remarked the other day, I am very much surprised you have not seen it. You have done so much hard work for the hardware association movement that I supposed they kept you posted on all of their literature.

At the bottom of page thirteen you will find their reference to their opinion that some trade papers are inclined to look at the private brand question through colored glasses. I think Brother Corey will have to change the color of his glasses or quit his attacks on those conscientious manufacturers who are not ashamed to brand their products with their own trade mark. If he continues roasting us manufacturers, how can he consistently ask us to support his organ, for he certainly has not the audacity to suggest that any of his advertisers receive any substantial benefit in the way of new business from advertising in the pages of the Bulletin.

But, Brother Stern, what I started to write you about was to call attention to this editorial on pages thirteen and fourteen of the Bulletin, which is entirely at variance with the facts.

You published the address President Bogardus delivered at Virginia Hot Springs, and you know that this editorial is not in line with the remarks and views as expressed by the president of the National Retail Hardware Dealers' Association.

The retailers have been complaining about misrepresentation. This does not justify them in making misrepresentations as publicly as they do in this editorial in the Bulletin.

You have given so much attention to this private brand business that I feel justified in the interests of the hardware trade in calling your attention to this article.

Yours very truly,

———, Aug. 12, 1905. "SQUARE DEAL."

The editorial referred to intimates very strongly, though, with the most ingenious sophistry, it does not actually state, that President Bogardus of the National Retail Hardware Association publicly favored private or jobbers' brands in a speech delivered at Virginia Hot Springs last June. The opening paragraphs of this editorial follow. The italics are our own:

The president and secretary of the N. R. H. A. attended the Hot Springs, Va., joint convention of the Southern Hardware Jobbers and National Hardware Manufacturers' Association upon invitation of Secretary Carter of the jobbers.

On Thursday afternoon President Bogardus delivered an address that has been given in nearly all the trade papers. The applause was generous and many compliments passed; the question of special brands was touched upon and approved by one side or the other as the argument happened to suit. While our members have different opinions on this subject, some favoring and some condemning special brands, as a rule and upon the terms mentioned the *majority will approve of the position of our president.* So long as manufacturers' standard brands are openly quoted at unprofitable figures and sold through objectionable, demoralizing channels, special brands will be pushed by jobbers and bought by retailers, and every article of this description that gives satisfaction to the consumer lessens the manufacturers' reputation and control of the business situation. Some so called "special brands" are to-day recognized as representing best quality and superior finish; they cover a wider variety of goods than any other manufacturer makes, therefore are easily advertised until they have become of great value to jobber and dealer alike. What makes a brand standard? Have not a few jobbing brands about reached that point?

As a matter of fact President Bogardus stated emphatically in the very plainest language, with no attempt at concealing his meaning, that he was opposed to private brands and that he strongly favored the manufacturers' own stamp. We include in the following excerpt practically all that Mr. Bogardus had to say on the subject. It is a masterly review of the question and admits of but one conclusion. In this case, as before, the italics are our own:

When the idea first came to the catalogue house man that by cutting the prices on standard goods a large quantity of unknown goods could be palmed off on the public at good prices, and at the same time doubt and suspicion could be cast on the retail trade, he recognized from the first, which the jobber did not, that his success meant the failure of the retailer. At first it was considered good business for the jobber to supply the wants of the catalogue house, and the catalogue house grew apace. The retailer soon discovered that he was being hurt, and that in the house of his friends. He protested with but little success. In the meantime the jobber was learning that the margin on standard goods was getting very small and to recoup himself goes to the manufacturer with this proposition, that the manufacturer should make for the jobber a lot of goods that were not to be stamped with the manufacturer's name, but should be stamped with such names and brands as the jobber might select. While the proposition was not entirely satisfactory to the manufacturer, yet in the hope of increasing his business he consented. Other jobbers asked and received the same favors. It was not long until the manufacturer found that he

had made a mistake, that he was losing his identity and that his own brand of goods was being either sacrificed for or crowded out of the market for special brands. The retailer who at first thought the special brands would help him soon discovered that *they were not always to be relied on;* that while the special brands on some goods meant steady, reliable goods that could always be counted on, it very often meant everything but steadiness and reliability. *For one year the brands were put on by one factory and the next by another factory, because of a lower price and consequent reduction in quality, until the brand meant nothing as to quality but simply that the goods were made up for the jobber whose name they bore.* Thus a condition of things has arisen that to the manufacturer is no longer bearable, *and all branches of the trade are suffering the evil effects of the movement.* The goods that the retail trade have made standard are being used as catspaws to palm inferior goods onto the public.

It would seem that the meaning of the President was obvious. As if to clinch his statement, however, and leave absolutely no doubt as to his position, the speaker said in concluding his masterly address: "I would cut out the growing evil of special brands."

The name of President W. B. Bogardus of the National Retail Hardware Association is synonymous with keen business acumen, omniscient foresight, and unflinching integrity. Thrice elected to the majestic position which he now holds, his influence over the hearts and policies of the retail dealers of the country is paramount. To accuse President Bogardus of duplicity were to cast a pebble into the sea. The effect would be identical. The surface of the hardware world would remain unruffled. The pebble would sink to hidden and unfrequented depths. The deed would be forgotten and the accuser rendered ridiculous. President Bogardus is a mighty influence. The editor of the Bulletin, realizing this fact, has unfortunately determined to make this mighty figure subserve the editor's personal ends. He has unwisely hung the stigma Tory upon the effigy of George Washington. The words of Mr. Bogardus are perverted to further a cause to which he is opposed.

Skipping a page in the July Bulletin, we come upon the following paragraph; the italics are our own:

> Stand by your local dealer as he stands by you with his time, his skill and his money. He helps build up the community and he makes it a better place for you both to live. His own success depends on your prosperity. *He has no use for mavericks—unbranded junk. He swears by the goods branded with the trade mark of the most skillful manufacturers on earth*—goods the like of which no other generation ever saw—and he has an abiding faith in the theory that the best agricultural implements in the world to-day are none too good for that major general of all the industries—the American farmer.

The great publications of the world, the periodicals that mold thought, that are respected and that wield an influence for good, are those of unimpeachable integrity, of consistency and reliability. No life endeavor is fraught with greater opportunities for the seeding of tares or luscious fruit than that of the publisher. The product of his pen is spread broadcast. Readers read and believe; the one act implies the other. Nothing that we see, no environment into which we pass, no book or newspaper that we read, but what leaves its imprint upon our character.

The paragraph quoted immediately above advises the consuming public that the dealer handles the genuine, the manufacturer's brand. On the preceding page, in the only editorial in the issue, the dealer is given the most cogent reasons possible for strict affiliation with the private or jobber's brand. What are we to assume? Either that the editor has adopted an inconsistent policy or that he is throwing a sop at his advertisers, or that he is advising his readers to advertise a lie. One or all of these conclusions may be drawn; none other.

Any attempt to carry water on both shoulders, to maintain consistently an inconsistent attitude, to pat the advertisers in one breath and damn them in the next, to graze in one field at one time, in another a minute later, and to maintain perfect equipoise on the fence when somebody is looking, is sure to call forth the ridicule or condemnation of all concerned, and for no one more than for the editor of a well-circulated paper. A definite fixed policy must be maintained. If the publishers of the Bulletin wish to retain the respect of their readers, they must keep faith with them, they must be honest and truthful.

"Oh, no!" says Mr. Bulletin Editor, "our policy is consistent. We are strongly in favor of private brands. The little paragraph pronouncing the value of manufacturers' brands was simply tacked on to show dealers how to fool their customers, how to advertise. It's a devilishly clever little scheme, don't you know, to announce that you have the genuine maker's brand for sale and then sell the jobber's."

With all due respect for the commercial value of any *coup d'etat* of the kind described, we are, however, more inclined to look at the moral side of the question. If the dealer buys private brands and then advertises them as genuine brands, he is advertising a lie. Moreover, he is placing this lie in black and white indelibly. To those who answer the advertisement "he swears by the goods branded with the trade mark of the most skillful manufacturers on earth—goods the like of which no other generation ever saw. . . ." Instead of giving this brand, the dealer is advised to substitute, for he must necessarily if he follows the Bulletin's advice, the jobber's private brand. As President Bogardus says, however, these goods are "not always to be relied on," and later, the private brand means "nothing as to quality but simply that the goods were made up for the jobber whose name they" bear. The customer gets the article recommended so highly. It may be good, may be bad. If the latter, he will live to give the dealer a black eye. The dealer will be minus his fair reputation and minus that respect for oneself that comes only with honest dealing, with the fearless expression of God's own truth.

A descent into deceit or misrepresentation, either in regard to the views of President Bogardus on the private brand question or with regard to announcements to be made by dealers in their local papers or elsewhere, is something which we note with astonishment and extreme chagrin in the official organ of the National Retail Hardware Association. True claims, true purposes, true interpretations should be our sole support in this world's turmoil. Honesty is not only the best policy, but it is life itself. Nothing false, no untruth can live and flourish.

If our own interpretation of the meaning and in-

tent of the articles printed above are wrong, if the purport of these articles is not as represented, if we have misquoted President Bogardus or if he has changed his opinion in regard to these matters, we shall be only too glad to withdraw our friendly warning and acknowledge that it was misdirected.

Personal Solicitation.

THE REPORT of Secretary A. J. Scott of the Michigan Retail Hardware Association is most gratifying from the standpoint of retail organization. One year ago this association had two hundred and twenty-four members. Fourteen of these resigned, went out of business or were dropped for non-payment of dues, leaving two hundred and ten of the old members. At the 1904 convention thirty new names were added. Between the 1904 gathering and the one held recently the services of a personal solicitor were engaged. The work of this solicitor was extremely satisfactory. During his term of service, he took two hundred and fifty-eight applications, or many more than the whole number on the roll, before he was engaged. The membership list now shows a total of five hundred and forty-nine, a gain of over one hundred and fifty per cent in one year.

This remarkable summary shows not only the value of personal solicitation when it comes to hardware organizations, but also the value of a little aggressiveness in any branch of business. A man on the spot to jot down the order, to make change and give a receipt, to avoid the necessity of sending money by registered mail, to explain the situation still further, offer valuable suggestions, and so forth, and so on, is invariably a profitable business getter, if he is at all wideawake, and if the most ordinary common sense is employed. It confirms in a measure the opinion that it would be immensely profitable for local dealers to spend one or two nights a week visiting some of their more infrequent customers.

The Michigan Retail Hardware Association is now the second in point of numbers of the state associations affiliated with the national organization. The officers of the association are to be congratulated over this gratifying showing. While the other state associations have not displayed any weakness as a general rule, a familiarity with Mr. Scott's methods may prove beneficial.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

It is a remarkable fact but it is none the less true that one-half of the people who enter a store to buy articles know that they want something of a particular description, such as a stove or a washing machine or a saw, without having determined, first of all, whether the purchase is to be high or low in price, of a dependable or a useless nature. One-fourth of the people who enter a hardware store simply want to buy something or nothing of the articles usually found in a hardware store, passing the portals merely for the sake of enjoying a few idle moments. Whether this one-half will buy what they really want, whether the one-fourth will buy anything at all, depends entirely upon the ability of the salesmen to read the character of these prospective customers, and his ability to successfully act upon the results of his conclusions.

If a salesman cannot read character successfully, it would be infinitely better for him to pass the rest of his life upon a farm. Character reading and the ability to successfully persuade the customer to purchase the kind of article which he really wants, consciously or unconsciously, the ability of the salesman to actually determine what kind of purchase, if any, would ultimately please the customer, the ability to reveal the weak spots in the customer's mental fabric and to press forward those claims for an article which most appeal to the customer, *the ability to make up the customer's mind for the customer*—this ability as it is possessed to a greater or less extent by the salesman, ultimately determines whether that salesman is remarkable, mediocre or worthless. This, then, is the primary factor which determines the value of a salesman; all other considerations are merely secondary. The appearance of a salesman, his address, his disposition, his amount of energy, his personal habits—all of these merely go to increase or diminish the clerk's ability to successfully follow up the lines as suggested by keen insight into a prospective purchaser's character. The former qualifications are desirable. It is doubtful if a clerk can be successful without them. But they should be modified in accordance with the character of the purchaser.

If character reading is of such immense importance it is decidedly advisable for clerks to cultivate it. A commonplace theory is held that a good salesman is born not made. Right here I should like to take a chance at this theory. There are two factors which mold a person's mind, his body and his sensibilities. These two factors are heredity and environment. These determining elements fashion the disposition of every man. Their relative preponderance differs with each mortal. A man inherits certain predilections, a certain face, a certain height, a keen sense of smell, poor eyes, a literary disposition, a bent toward manufacturing or farming, etc. All of these attributes are, however, strengthened or diminished by the surroundings into which a person is born and in which he develops. Special attributes such as character reading are developed or eradicated according as the opportunities for furthering this study are seized or lost. I consider it all nonsense for a man to argue that well directed efforts along some certain lines, concentrated study, untiring energy, enthusiasm and certain other qualities will not make a man successful in any line he chooses to follow. Environment does count, and it counts an awful lot, whatever temperament the subject may have inherited.

It is not too much to say, then, that practice and study and a little common sense, coupled with enthusiasm, will make a man who was heretofore blind to the dispositions, likes and dislikes of other people, a keen character reader. It is not too much to say that if the desire for improvement is actually present in generous proportions, any clerk can make himself a good salesman. It is perhaps not too much to say that if there is a genuine desire toward the achievement of any result possible for mortals, if that desire is never lost sight of, it can be realized.

News Siftings

MEETINGS.

National Hardware Association—Washington, D. C., November 8, 9, 10.

American Hardware Manufacturers' Association—Washington, D. C., Nov. 8, 9, 10. Headquarters, The New Willard.

The Kramer Bros. Foundry Co. of Dayton, Ohio, claim to carry constantly in stock repairs for forty thousand different stoves. They offer special prices on quantity orders.

The Great Western Stove Co. of Leavenworth, Kan., are about to establish a branch at Oklahoma City, Okla. It is expected that early in the fall the company will be able to distribute goods from this point to the great Southwest.

The Weller Pattern Co. of Quincy, Ill., furnish designs and estimates for all kinds of stove patterns. Their record during the past entitles them, it is claimed, to the consideration of every manufacturer, who is now on the market for these goods.

Smith's Latest Improved Double Lock nested stove pipe is made by the Ohio Stove Pipe & Mfg. Co., of New Philadelphia, Ohio. This pipe can be cut when a fractional joint is required without the use of a rivet. It is said to lock automatically without the use of tools of any kind.

The J. L. Morris Stove Repair Co. of Chicago, report a most gratifying increase in their business during the past year. Owing to the able management of their genial G. A. Rossbach, their shipments are even more accurate and expedient than before. This company handle a very large variety of stove repairs, range and furnace repairs.

The Barler Ideal oil heater contains wick tubes which are said to prevent even the suspicion of an oil smell. A medium-sized stove will, the manufacturers claim, thoroughly heat a large room in cold weather at the cost of one cent an hour. Its handsome appearance is said to help the salesman. These heaters are made by the A. C. Barler Mfg. Co., 104-106 Lake street, Chicago.

The Vedder Pattern Works, Troy, N. Y., believe that they are entitled to the careful consideration of all manufacturers in the market for stove patterns. Their long experience since 1835 has placed them in a position where they understand the details of this work thoroughly, and are able not only to turn out the best kind of workmanship, but to offer many useful suggestions.

The Pittsburgh Stove & Range Co., western agent, W. D. Sager, 38-40 Michigan street, Chicago, announce that there are many stove dealers who make a profit of fifty per cent on the Pittsburgh steel range. These ranges are made with planished steel outside body, decarbonized steel inner body and asbestos mill board between the bodies. The ovens are made of No. 14 galvanized steel plate.

Most everybody knows that Black Kid stove polish is made by the Nickel Plate Stove Polish Co., of Chicago. There are few users of stove polish who would be puzzled over the name of the manufacturer of the Black Jack stove polish. But not everyone knows that Black Eagle benzine paste stove polish is made by this famous concern, together with their Peerless iron enamel and their Russian asbestos furnace cement. Nevertheless, all of these goods are being turned out in large numbers, and are meeting with a most gratifying reception.

The Newport Sandbank Co., Incorporated, Newport, Ky., with Knapp Bros. as western representatives, 123 Franklin street, Chicago, claim that for quantity, quality, variety and unlimited shipping capacity they are unsurpassed when it comes to molding sand. J. Frank Dye is the president of this prosperous concern. This molding sand was granted the highest award at the World's Fair, St. Louis. An interesting catalogue will be mailed free of charge upon application.

The S. M. Howes Co., 40-46 Union street, Boston, offer for sale three grades of cast ranges, the Monarch, Queen and Duchess. All three grades are equally well made, it is said, the difference being in size and cooking capacity. The many reasons why these ranges have proved so popular are fully brought out in a circular recently published. Their stoves are said to be simple in style and yet beautiful and decorative. The plain surfaces are prominent and highly finished.

The Cahoone Co., 41 Park Row, New York City, manufacturers of the famous Anti-Smoke stoves and ranges, announce that these goods possess more selling points than any others. The claim is made that they appeal to the housewife and to the merchant equally strongly. They request dealers to get in touch with them, and to introduce this trade-winning line into their locality, thereby reaping pleasing benefits.

C. H. Greene, formerly of C. H. Greene & Co., Syracuse, N. Y., manufacturers of the celebrated "Eureka" snap flasks and other sundry foundry supplies, has associated himself with the S. Obermayer Co. of Chicago as superintendent of that department—namely, the manufacture of snap flasks, floor flasks, bench & floor rammers, etc. The S. Obermayer Co., at their Chicago plant, have added a large wood working department, with special and improved machinery to facilitate prompt shipments of flasks of all kinds.

Catalogue No. 63 describing the Jewel gas heaters and radiators is the latest published by George M. Clark & Co., division of American Stove Co., Chicago. In this their twenty-fifth year, they present a complete line of the best heaters produced during the past in connection with certain heaters which have never before been manufactured. These heaters are furnished for any kind of fuel, in all sizes and with a wide variety of price. This firm will be pleased to furnish attractive advertising cuts to those agents who wish to advertise their goods. Booklets, posters, cook books and other advertising matter of a like nature will be furnished free of charge.

The Howe ventilator, manufactured by the Galusha Stove Co. of Rochester, N. Y., is said to be the only stove on the market that brings a large and constant stream of fresh air into the house, and yet never allows the air to become red hot destroying the oxygen

or life giving element. The Howe ventilator takes a constant stream of foul and cold air off the floors, it is claimed, and sends it out through the chimney. It is said, also, that this stove equalizes the temperature in a large room so that by actual test a variation of only from two to five degrees is shown in a thermometer hanging at the floor and ceiling. The Cook & Van Evera Co., Chicago, Ill., are western agents for this firm. The Galusha Stove Co. will be pleased to send their booklet, "How to Live An Indoor Life" upon application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

MONARCH GAS HEATERS.

Monarch gas heaters are the subject of a very pretty catalogue gotten out by the Standard Lighting Co. division of the American Stove Co., Cleveland, Ohio. This is catalogue No. 47 for the fall of 1905. The Standard Lighting Co. offers a complete line of gas heaters, gas radiators, gas logs and gas grates. In the selection and construction of these stoves they have been guided by those who have had many years of successful experience in the manufacture and sale of this class of heating apparatus.

Their line includes the Monarch Calorific heaters, which are said to have proved so popular during the last season that the manufacturers have decided to add to their line two new heaters of the same pattern; one with three tubes and one with five tubes. These heaters use incandescent fuel and are constructed with powerful cast iron burners adaptable for either artificial or natural gas.

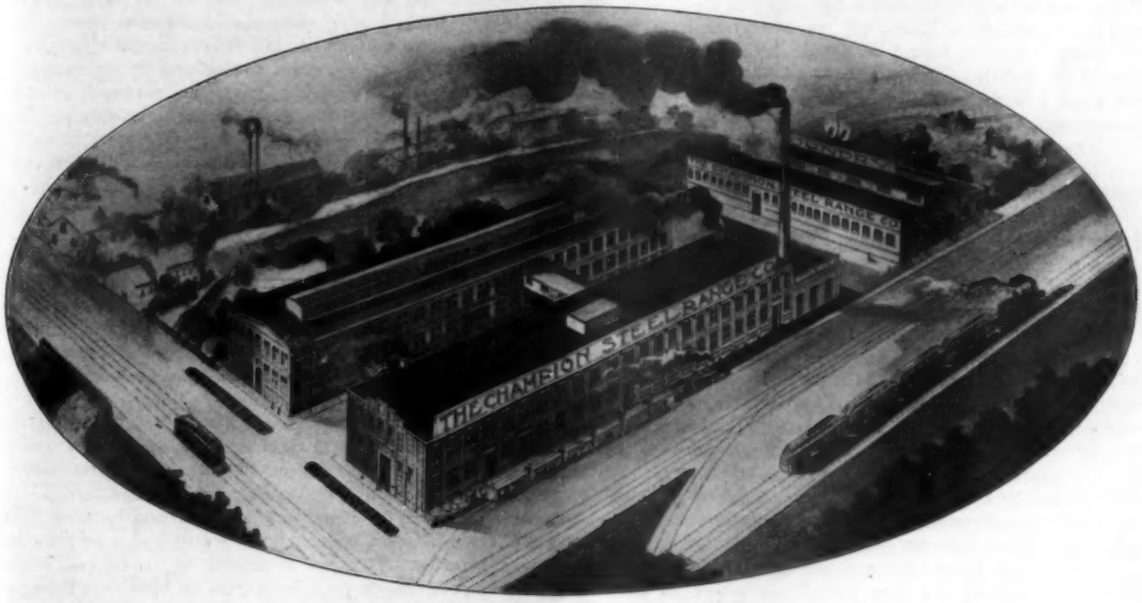
The Monarch ventilator No. 164 has had four years of success, clearly demonstrating the desirability of continuing its sale. The Monarch heater No. 160 is arranged so that the products of combustion ascend the two side tubes to the upper heat chamber, thence down the middle tube, escaping at the rear. The Monarch Quadruplex No. 64 is in its third season. There are four pipes and each burner can be used independently or all of the burners simultaneously as desired. The heat chamber at the top is closed, thus preventing the escape of fumes and making the inner hot air tubes perfectly straight instead of tapering.

Monarch heaters are made with open fronts also. Heater No. 77 is impressive because of a beautifully designed open work top, artificially swelled cast iron front and other handsome features. The rear flue construction and the immense radiating surface make this heater very powerful.

The Standard Lighting Co., of Cleveland, Ohio, will be pleased to send one of these catalogues to dealers upon request. When writing for same kindly add: Saw it in THE AMERICAN ARTISAN."

THEIR NEW PLANT.

The Champion Steel Range Co., Cleveland, O., heretofore always crowded for room and unable to supply the heavy demand for Champion and Marquart steel ranges, have completed a new plant which will enable them to make a much better showing than previously in satisfying requests for quick shipments. The accompanying illustration shows their new establishment. The main building is 80x206 feet; two stories in height, with a boiler house 22x42 feet and an assembling room 100x300 feet. The part completed at the present time is equipped with all the latest machinery and the other buildings will be furnished in the same manner. All of the buildings will contain patent reversible windows to be set at any angle, allowing the air to circulate freely.



New Plant of the Champion Steel Range Co.

This plant is located on the Wheeling & Lake Erie Belt Line connecting with all of the routes running into Cleveland. Ample provision is made for additional expansion if their constantly growing business makes such a move desirable. They own seven acres of land in the immediate vicinity. Recommendations from many users of the double flue steel ranges make it seem probable that the firm was wise in providing for future needs.

Private Brands

The question of the employment of private brands by hardware jobbers, instead of the regular brands used by the manufacturers themselves, has been agitated more freely of late than ever before. As a rule we find that manufacturers and retailers are solidly opposed to their use.

To The American Artisan.

I have sold and handled jobbers' private brands for twenty years. I have invariably found them very satisfactory as regards price and quality. I am convinced that jobbers' private brands are all right. "A. D."

To The American artisan:

I should like to take exception to the remarks of "Interested" as published on page twenty-six of the August 12 issue. This communication seems to be the product of a dealer, and as a brother dealer I should like to speak from the same standpoint. Although manufacturers have taken no radical action in regard to private brands until the last year, I do not believe that they were napping in any sense of the word. It is true that they are now opposed to private brands, and that private brands have reached proportions which are well nigh insurmountable. The action, however, was forced upon the manufacturers willy nilly. They were obliged to conform to the jobbers' orders. Most of the manufacturers have seen the evil encroaching upon their domain for a long time. Many absolutely refused from the first to stamp their output with any but their own insignia. Those manufacturers who are now using a private brand in selling to jobbers are those who prefer money to honor. These were certainly not caught napping, and in spite of your announcement under the heading private brands, "As a rule we find that manufacturers and retailers are solidly opposed to their use," I believe that many manufacturers are glad to stamp the products going to the jobber with the jobber's name instead of their own. Far from being caught napping, these manufacturers believe that they have been wide awake. They believe that by the use of private brands, they are placing their hitherto unknown and unworthy products in markets where worth and fame are not valued highly.

The private brand advocates amongst the manufacturers are mostly outlaws and from what I can gather do not belong to the manufacturers' association. The manufacturers' association seems to be composed of the oldest, the best known and the most firmly established manufacturers in the trade. These men value their names and are more responsible than those who do not.

My own experience with private brands was not particularly fortunate. I took them on in order to avoid the competition and the price cutting which were forced on me when I looked through the catalogue of a large mail order house and saw my regular line of tools quoted at prices below those at which I was buying them. I studied up the question of jobbers' brands and listened to the arguments of their traveling salesmen. I took on the best jobber's brand that I could find. The line was not, of course, quoted in any catalogue house catalogue, and I felt that I was safely out of range of the catalogue house prices. I lived to realize my mistake. The mechanics in my neighborhood were not disposed to pay any more for a tool that they didn't know anything about and which was no better than tools that they did know about. The catalogue houses quoted a good tool at a low price. I quoted an unknown tool at a comparatively high price. The scheme worked all right for a while, but after I had sold a number of the jobbers' brands the people saw their mistake and stopped buying tools from me. At present I am handling the regular manufacturers' brands and quoting them at prices as near as possible to the mail order houses. As a rule I don't make much on them—sometimes I make nothing at all—but I have the reputation for being able to sell goods just as cheaply as any mail order house, and this reputation enables me to make money on some of my specialties.

If you would kindly allow me space enough for these words, I would be greatly obliged.

"Common Sense."

To The American Artisan.

The question of private brands is primarily one to be fought by the jobbers and manufacturers, but the retailer also is concerned and any action one way or the other would undoubtedly affect him in more than a superficial way. So long as the dealer continues to sell the regular manufacturers' brands at a profit bringing price, and so long as the catalogue house is able to make a profit on these same brands at a much lower price, the dealer's reputation is going to be hurt and the catalogue house is going to reap benefit. If both the dealer and the catalogue house are going to continue selling regular manufacturers' brands, in order to save his reputation the dealer will necessarily have to cut out all profits on the competing lines and sell them merely as leaders, making up for losses on these goods by abnormal profits on others. I see no reason why the dealer should not do this, I feel that it is more honest and more lucrative than for a dealer to take hold of a brand which is not especially good and sell it at a price higher than the best goods because the customer knew nothing about the brand and nothing about the price at which it should be sold.

I see all the evils of the private brand. I fully appreciate that the manufacturers are right logically, and that it would prove beneficial for the retailers and even most of the jobbers to conform with the manufacturers' wishes. Words can hardly express, however, my indignation at those manufacturers who sell to the mail order houses. They resemble in a very strong way a bigamist. They are attempting to handle two wives as it were, jollying up each one and at the same time stabbing each one in the back. I realize that we have no right to protest against the manufacturers selling to any people they please. The manufacturers are insolent and repulsive, however, when they attempt to declare what goods the dealer should handle to save himself from man slaughter in which the manufacturer is the hypothetical murderer.

Let the manufacturers go on selling to whomever they please; let them cut prices for one concern, and raise them for another. We have no right to complain, though we have a right to strike back if we see fit. Let them not, however, assume the position that they can dictate to the dealer what goods he shall sell and how he shall be killed.

The catalogue houses have hurt me and my neighbor dealers more perhaps than most dealers in the country. If there is any trade abuse that I should like to have remedied it is this. I have studied the question very carefully, I have read your comments upon private brands, and the communications from others. I am firmly convinced that the catalogue houses should be curbed in some way. I am likewise convinced that private brands cannot do the curbing unless every dealer in the country stops selling makers' brand and swears never to sell them again. Even in this case he will be biting off his nose to spite his face. It is up to the jobbers and the leaders of the retail hardware organizations to find some stronger and better resort for the dealer troubled by mail order competition than private brands.

"Victim."

The Hardware Record.

American Hardware Mnfs. Assn.
Pres., J. C. Birge, St. Louis, Mo.
Vice-Pres., C. W. Asbury, Philadelphia, Pa.; Geo. W. Corbin, New Britain, Conn.: Henry B. Lupton, Pittsburgh, Pa.
Sec.-Treas., F. D. Mitchell, 309 Broadway, New York.
Ex. Com., W. M. Taussig, New York; Sam'l Disston, Philadelphia; Wm. H. Hays, Pittsburgh; John E. Harbster, Reading; Geo. P. Hart, New Britain; W. M. Pratt, Greenfield, Mass.; E. G. Buckwell, Cleveland; E. B. Pike, Pike, N. H.

Arkansas Retail Hdw. Dealers' Assn
Pres., T. B. Stewart, Newport.
1st V.-P., R. P. Allen, Van Buren.
2d V.-P., W. E. Dean, Portland.
Sec.-Treas., C. E. Taylor, Little Rock.
Ex. Com. (till June, 1907), Hamp Williams, Hot Springs; R. F. Rays, Russelleville; J. P. Simpson, Malvern; J. R. Mott, Helena; (till June, 1906), Frank B. Gregg, Little Rock; C. T. Rosenthal, Batesville; M. Pittman, Prescott.

Chicago Retail Hdw. Dealers' Assn.
Pres., H. E. Gnadt.
V.-P., W. B. Costello.
Sec., G. R. Lott.
Collector, John Hora.
Treas. J. L. Smith.

Illinois Retail Hdw. Dealers' Assn.
Pres., Frank B. McKenney, Rockford.
V.-P., F. Giessing, E. St. Louis.
Sec., L. Nish, Elgin.
Treas., Geo. A. Englehardt, Chicago.
Ex. Com., Frank B. McKenney, Rockford. L. Nish, Elgin; Geo. A. Engelhardt, Chicago; Chas. Johnson, Peoria; F. F. Porter, Chicago; Wm. Bittel, Peoria; H. G. Cormick, Centralia; L. D. Ray, Belvidere; W. T. Gormley, Chicago.

Indian Territory Retail Hdw. Assn.
Pres., A. L. Severance, Durant.
1st V.-P., Geo. W. Mowbray, Tulsa
2nd V.-P., W. J. Pettee, Oklahoma City.
Secy., W. G. Johnston, Oklahoma City.

Indiana Retail Hdw. Dealers' Assn.
Pres., A. N. Shidler, South Bend.
1st V.-P., Chas. Frame, North Manchester.
2nd V.-P., Walter B. Creed, New Albany.
Sec.-Treas., M. L. Corey, Argos.
Ex. Com., W. P. Lewis, New Albany; Chas. E. Hall, Indianapolis; J. L. Fulton, Portland

The Inland Empire Implement and Hardware Dealers' Association.
Pres., C. L. Butterfield, Moscow, Idaho.
1st V.-P., E. E. Lucas, Davenport, Wash.
2d V.-P., Dana Child, Spokane, Wash.
Sec., E. W. Evenson, Spokane, Wash.
Treas., J. A. Fridaker, Spokane, Wash.

Iowa Retail Hdw. Dealers' Assn.
Pres., H. S. Vincent, Ft. Dodge.
V.-P., C. E. Haas, LeMars.
Sec.-Treas., A. R. Sale, Mason City.
Directors, T. A. Nichols, Burlington; D. S. Stouffer, Iowa City; E. C. Moore, Waverly; S. R. Mills, Mason City; U. S. Johnston, Tama; R. J. Breckenridge; Brooklyn; L. C. Clifford, Des Moines; F. P. Bollinger, Alton; W. J. Langfitt, Harlan.

Kentucky Retail Hardware and Stove Dealers' Association.
Pres., J. C Frederick, Owensboro.
1st V.-P., U. S. Shacklett, Fulton.
2nd V.-P., George W. Buck, Louisville.
Treas., J. Steitler, Owensboro.
Sec., John R. Sower, Frankfort.

Michigan Hardware Association.
Pres., J. H. Whitney, Merrill.
V.-P., E. B. Standart, Holland.
Treas., Henry C. Weber, Detroit.
Sec., Austin J. Scott, Marine City.
Ex-Com., S. Winchester, Jackson; J. G. Patterson, Detroit; E B. Standart, Holland; E. S. Roe, Buchanan; John Popp, Saginaw; J. B. Sperry, Port Huron; C. M. Alden, Grand Rapids; J. H. Murray, Cadillac; George P. Griffin, Albion; T. Frank Ireland, Belding.

Minnesota Retail Hardware Assn.
Pres., A. T. Stebbins, Rochester.
V.-P., George Evenson, St. Peter.
Sec., M. S. Matthews, Minneapolis.
Treas., G. F. Duerre, Plain View.
Ex-Com., W. H. Tomlinson, Le Sueur; J. H. Smith, Minneapolis; H. R. Schroeder, St. Paul; F. W. Lucas, Litchfield; W. T., Cowing, Alexandria; C. H. Casey, Jordan; Louis Gewalt, Breckenridge; Chas. F. Ladner, St. Cloud; J. F. McGuire, St. Paul; A. T. Stebbins, Rochester; Geo. M. Evenson, St Peter.

Missouri Retail Hardware Dealers' Association.
Pres., Tayler Frier, Louisiana.
V.-P., Wm. H. Hahn, St. Louis.
Sec.-Treas., Frederick Neudorff, St. Joseph.
Ex. Com., F. A. Kannsteiner, St. Louis; W. C. Shoop, Richmond; O. W. Johnston, Marshall.

National Hardware Association.
Pres., S. A. Bigelow, Boston.
Vice-Pres., John C. Koch, Milwaukee.
2nd Vice-Pres., Brace Hayden, San Francisco.
Sec.-Treas., T. James Fernley, Philadelphia.
Ex. Com., R. M. Dudley, Nashville; W. S. Wright, Omaha; W. D. Taylor, Cleveland; F. Barker, Elmira, N. Y; J. D. Moore, Birmingham, Ala; P. E. Strauss, Boston.

National Retail Hdw. Association.
Pres., W. P. Bogardus, Mt. Vernon, Ohio.
1st V.-P., E. M. Bush, Evansville, Ind.
2d V.-P., H. F. Emery, Fargo, N.D.
Sec., M. L. Corey, Argos, Ind.
Treas., A. T. Stebbins, Rochester, Minn.
Ex. Com., T. Frank Ireland, Belding, Mich.; S. R. Miles, Mason City, Ia.; A. H. Abbe, New Britain, Conn.; Frank A. Bare, Mansfield, O; C. H. Williams, Streator, Ill.

Nebraska Retail Hdw. Dealers' Ass.
Pres., Max Uhlig, Holdrege.
1st V.-P., Albert Degner, Norfolk
2d V.-P., Frank Haecker, Friend.
3d V.-P., M. A. Hargleroad, Holstein.
Sec., J. Frank Barr, Lincoln.
Treas., H. J. Hall, Lincoln.

N. Dakota Retail Hdw. Dealers' Ass.
Pres., H. F. Emery, Fargo.
1st V. P., Martin Jacobson, Minot.
2d V.-P., H. H. Walters, Casselton.
3rd V.-P., O. I. Butler.
Sec., C. N. Barnes, Grand Forks.
Treas., H. T. Helgesen Milton.
Members Ex. Com., W. R. McIntosh, Bottineau; E. E. Elliott, Sanborn; W. H. Pinkerton, Lakota.

Ohio Hardware Association.
Pres., John F. Baker, Dayton.
V.-P., C. S. Johnson, Barberton.
Cor. Sec., Frank A. Bare, Mansfield.
Fin. Sec., A. L. Shearer, Dayton.
Treas., L. F. Stahler, Waverly.
Ex. Com., John Kramer, Dayton; C. W. Jewell, Utica; W. S Perry, Zanesville; Frank W. Ingalls, Byran Will M. Crumrine, Salem; A. Boebinger, Cincinnati; John Spoerl, Hamilton; W. F. Jacobs, Youngstown.

Pennsylvania Retail Hdw. Assn.
Pres., Geo. V. Thompson, Mt. Jewett.
V.-P., J. H. Bowers, Charleroi.
Sec.-Treas., J E. Digby, McKees Rocks.
Ex. Com., Joseph M. Selheimer, Lewistown; J. E. Digby, Mckees Rocks; Geo. V. Thompson, Mt. Jewett; Pa.; Geo. L. Moore, Brownsville.

St. Louis Stove Dealers' Assn.
Pres., R. H. Myers.
1st V.-P., E. L. Wachter.
2d V.-P., G. M. Rinie.
Sec., Louis Boehl.
Treas., F. A. Kannsteiner.

Southern Hardware Jobbers' Assn.
Pres., F. B. Dunlap, Ft. Smith, Ark.
1st V.-P., J. S. Warren Memphis, Tenn.
2d V.-P., Frank S. Gray, Jacksonville. Fla.
Sec.-Treas., C. B. Carter, Knoxville, Tenn.
Ex. Com., Bruce Keener, Knoxville, Tenn.; Chas. Ireland, Greensboro, N. C.; O. B. Barker, Lynchburg, Va.

Texas Retail Hdw. and Imp. Assn.
Pres., S. L. Erwin, Honey Grove
Secy. & Treas., J. W. McManus. Waxahachie.
1st V.-P., R. L. Penick, Stamford.
Dir.: T. T. Clark, Ennis; H. S Allen, Calvert; W. A. Spangler, Bonham; D. B. McCall, Waxahachie; W. M. Gunnel, Charles Hutchins, Sam Marcos.

Wisconsin Hdw. Dealers' Assn.
Pres., Ralph Burtis, Oshkosh.
V.-P., E. Tietgen, Manitowoc.
Sec.-Treas., C. A., Peck, Berlin.
Ex. Com., W. H. Busse, Milwaukee; E. R. Ramm, New London; Jas. Murphy, Racine; H. J. Krueger, Neenah.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 42 to 47 inclusive.

W. E. Talmadge is one of the incorporators of the Sheboygan Sash Lock Co., Sheboygan, Wis., capitalized at $25,000.

The Virginia-Tennessee Hdw. Co. of Sullivan county, Tenn., have increased their capital stock from $50,000 to $75,000.

The pistol factory of Sears, Robuck & Co., Chicago, at Meriden, Conn., was recently burned, entailing a loss of about $20,000.

C. C. Lynd, H. C. Thomas and W. G. McKay are the incorporators of the LaCrosse Cornice & Corrugating Co., LaCrosse, Wis., capitalized at $10,000.

James Peters & Son, hardware manufacturers, Philadelphia, Pa., have acquired property adjoining their plant on Front and Norris streets, and will erect a building 54x120 feet.

H. Whiting is president, M. F. McKeel is vice-president and treasurer, and C. H. Richardson is secretary of the McKeel, Richardson Hdw. Co., Washington, D. C.; capital stock, $100,000.

The America Co. of Rockford, Ill., is about to increase its capital stock from $50,000 to $100,000. This company are large manufacturers of fishing reels, wrenches, gasolene sad irons, warehouse trucks and things of like nature.

Fire on August 2d destroyed the manufacturing plant of H. W. Brown at Decatur, Ill. This company formerly manufactured a general line of hardware and a special cattle dehorner. The loss was $4,000, partially covered by insurance.

The United States Chain Factory, at Maxwell, Ind., has closed down because of a demand by their employes for a different construction of the wage scale. This factory is said to be far behind in its orders, but will not reopen until the difficulty is adjusted.

It is announced that the Joseph Woodwell Co., the pioneer hardware firm of Pitsburgh, are about to erect a new building on their present site on the northwest corner of Wood steet and Second avenue. The building will probably be an eight-story fireproof structure.

Articles of incorporation for the Reynolds Hdw. Co. of Davenport, Iowa, were filed recently. The capital stock is $15,000, with officers as follows: President S. M. Reynolds; vice-president, Edward Balch; secretary, James Kouth. This company has been in existence for some time.

A petition of bankruptcy has been filed at New York city against the A. J. Ellis Co., a corporation of New Jersey with factory at West New York, New Jersey. The Ellis Co. are manufacturers of sheet metal work, fire proof windows and doors. It is alleged that the company is insolvent.

The Union Hdw. & Metal Co. of Los Angeles, Cal., are engaged in the erection of a four-story wholesale hardware house 170x218 feet. They are also erecting a warehouse 150x218 feet. It is proposed to have

trackage inside of this warehouse for the loading and unloading of cars. It is not the purpose of this concern to engage in the manufacturing of hardware, these buildings being required for jobbing purposes only.

The wife of a rural delivery mail carrier is the inventor of a combination heating and cooking stove for rural route mail wagons. With this stove, it is expected that carriers can keep their wagons warm and cosy, and can also enjoy hot coffee and a sizzling wienerwurst when the temperature is twenty-six and a half degrees below zero. Arrangements are now being made with the Hoke Mfg. Co. of Frankfort, Ind., for its manufacture.

The Peters Cartridge Co. of Cincinnati announce that numerous records have been made recently by users of Peters cartridges. Percy C. Logan broke one hundred straight targets at the regulation distance on July 28th. At the annual meeting of the Ohio State Rifle Association and the Ohio National Guards held at Newark, Ohio, July 24th to the 29th, Lieutenant Benedict won the skirmish run with a score of ninety-six out of one hundred, never before equaled. All of the revolver matches held at this meet were captured by users of Peters cartridges. Seventeen consecutive bulls were made by Lieutenant Casey at the tournament of the State Rifle Association held at Creedmoor, N. Y., July 26th to August 1st. Numerous other high marks were set by those expert marksmen who refused to use other than Peters well-known cartridges.

ELMORE SCREW DRIVER.

The Elmore screw-driver, manufactured by the Elmore Mfg. Co., Southington, Conn., is a good selling specialty warranted to be practically indestructible. It is patterned on the lines of the well known standard makes of this country, so that in general appearance it is not at all unlike the standard driver offered throughout the general hardware trade.

Fig. 1.

Fig. II.

The manufacturers of these tools have lived through a shop life and have built their drivers on the lines of meeting the requirements of every well established machine shop and artisan.

Fig. 1 illustrates the Elmore driver's construction. The steel or rod of the driver extends the entire length of the handle. The head is upset and threaded at the end and is driven into the handle, the ferrule being slipped on before and the blade is forged, making it impossible, it is claimed, to ever remove or split the handle by using it as a chisel. A blow in contact with the head is repeated at the end of the blade without any danger of ever splitting or disturbing the wood handle. In addition thereto they use a solid steel ferrule and drill through the ferrule the end of the wood and the shank of the driver, riveting same very firmly. Unlike other drivers made of this type, there is said to be no possible chance of the handle ever getting loose or being split.

Fig. III.

Fig. 2 represents the Baby Elmore. This is a very handy tool for pocket use, the rod being 7/32" in diameter. The construction of this is as shown in Fig. 1.

Fig. III represents the extension screw-driver, or two screw-drivers in one. Entire length 24"; length of total blade 19"; length of the first blade 7"; length of the second screw.

Fig. IV.

Fig. IV represents the improved machine driver, with square shank, which enables the artisan to use a wrench for the application of additional power. The entire length of this is 10¼".

Their general line of drivers are made in lengths of from 2½" to 30", taking a standard list for all sizes. They use a special high grade steel, which is said to be unsurpassed for strength and durability.

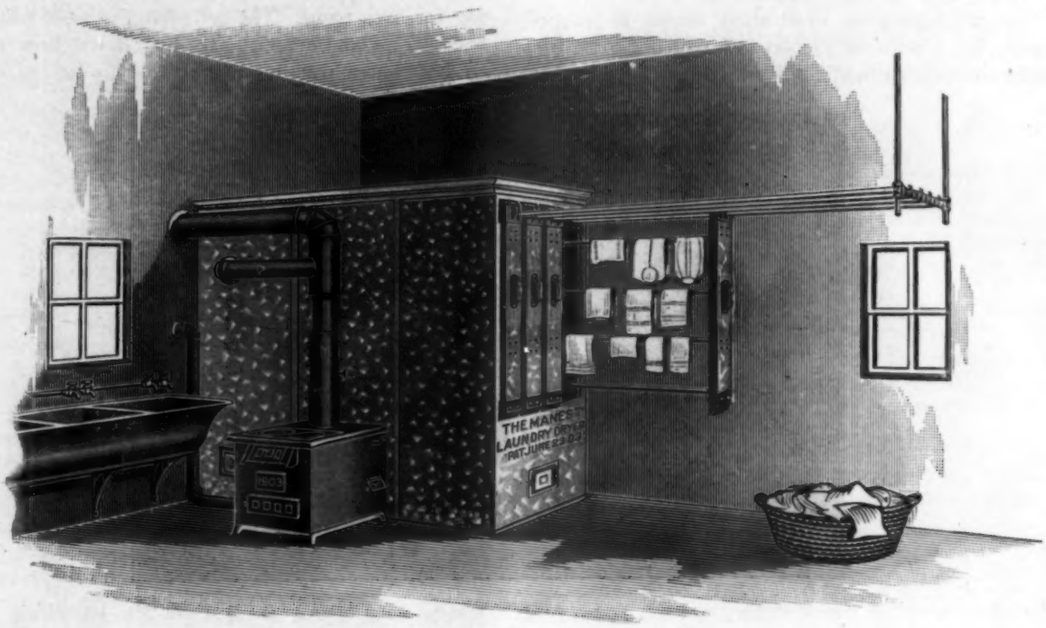
A sample of any one of these drivers will be sent to the legitimate hardware trade complimentary, to show the class of work produced. While this firm are new to the general public the manufacturers are not new in the manufacturing of high grade tools. The goods will be sold by the Smith & Hemenway Co., 296 Broadway, New York City. Further descriptive matter will be sent on request. When writing kindly add: "Saw it in THE AMERICAN ARTISAN."

MANEST LAUNDRY DRYER.

The older generation and likewise the recently married of our housewives who pass the time in outlandish places sometimes exhibit the greatest consternation and chagrin in looking over modern kitchen and laundry appliances. The good old days, when a person had to get down on his knees to scrub the floor, when the magnificent fagots were brought from the wood-pile, when soap was made instead of bought, and when no one had imagined running hot water—those are the days in the opinion of the older generation, when cooking was pleasant and the age not decadent. To compare the triumphs of civilization to a victory of effeminateness is hardly just, however. Very few would claim that the soldiers who fought at Gettysburg were more effeminate than the savages of the stone age, though they certainly were supplied with more convenient and more desirable cooking utensils.

Improvement in cooking utensils, in appliances which will reduce the drudgery of cooking, washing clothes and so forth are just as desirable and as apropos as any other improvement.

The Manest laundry dryer is an apparatus which would undoubtedly meet with the disapproval of our Puritan ancestors living twenty-five or fifty years ago. The old-fashioned way was to trample over the snow, tightening the clothesline, then fastening the clothes with hands tremulous from the biting cold. In summer these same Puritan dames were often forced to run around in the rain gathering in clothes before they became wetter than when taken from the wash-tub. By the use of the Manest laundry dryer, the clothes can, it is said, be dried in-doors with the same satisfactory results that the most favorable weather can produce to clothes hanging outdoors. In fact, most of the users of this dryer claim that the after effects are superior.



Manest Laundry Dryer.

The apparatus consists of a substantial stove or laundry heater which boils the clothes and heats the irons, and at the same time furnishes heat for the drying chamber in which the clothes are hung, entirely protected from soot, dust or dirt. The drying chamber is shown in the accompanying illustration. It is made of heavy galvanized metal, thoroughly fire proof. The construction is said to be strong, well finished and simple. The makers claim that the heater requires no more attention than a kitchen stove or range and consumes less fuel than the ordinary laundry stove.

The manufacturers are Mannen & Esterly, 811-815 St. Clair street, Cleveland, Ohio. They will be pleased to send additional information to dealers upon request. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

FILES AND RASPS.

It is sometimes extremely hard to eulogize an article, or a thing, or a book, which is not up to the average or a little above it, but it is not only easy but even pleasurable to speak well of something praiseworthy in itself. Perhaps this fact accounts for the very interesting and convincing manner in which the latest catalogue of Henry Disston & Sons, Philadelphia, describing their files and rasps, is written. The Disston file has been known so long by retailers, consumers and jobbers, and its meritorious features are so well established, that any eulogy of these tools is almost sure to follow the mention of their name.

This latest catalogue contains over seventy-five pages and is filled with illustrations and statistics. In the preface we learn that Henry Disston & Sons use over thirty thousand dozen Disston files annually in their own works. The fact that they make files, use files, know what files should do, is said to enable Henry Disston & Sons to make files so they will do it. Every file stamped with the name Disston is warranted as perfect as a file can be made and is guaranteed to be the product of the best crucible steel. Each file is said to be carefully inspected and thoroughly proved before leaving the factory.

In publishing the catalogue they endeavor to illustrate the different files most generally used. This will enable the consumer to readily determine the file required for a particular purpose, thus saving both the dealer and the buyer considerable trouble by enabling them to specify correct names, sizes, etc.

The manufacturers are said to be the only ones in the United States making the steel from which their files are produced. They claim that they are thereby enabled to secure an absolute uniformity of quality. The blanks are carefully forged, it is said, to the most approved patterns adapted for the various classes of work. They have originated a number of shapes as the Great American cross-cut saw file, Chisel Point file for inserted teeth, Acme with safe back for filing hand saws, etc.—all these are said to be accepted by the trade as regular stock goods. The teeth are formed to give the greatest amount of strength with

sharp, clean cutting edges, and at the same time to allow sufficient clearance to prevent clogging. All of their files are hardened by a special process which is said to impart strength and durability. Henry Disston & Sons make the claim that for wearing quality the Disston brand files are unequaled.

Illustrations are shown of the different "cuts" in general use, including the double cut, single cut and rasp cut; also the sections of files in general use and the sizes of regular files and rasps.

Every dealer should have one of these catalogues, not only for the purpose of ordering Disston files, but also to obtain a good idea of the many files now being manufactured and kept in stock by this progressive concern. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

SAMANTHA AND JOHN.

The accompanying illustration shows an original design for a window display, of which Scott Bros., hardware merchants at Sullivan, Ind., are the authors.

The affair involved considerable patience, and a great deal of the adroitness which children display in building a house of playing cards. Mr. W. G. Scott describes the affair as follows:

"Samantha, as she is known, is composed of the following articles: Her head is made of a tea steeper, the spout of which forms the nose, the lid is connected with a jelly funnel which forms the chin and neck. Her body and limbs are a tea can and joined rule over which is placed a netted map cloth for a skirt. Tack pullers are used for arms and hands. She has a hat, the brim of which, is made of asbestos paper and perforated coal oil stove wick is used for the crown. The streamers are asbestos rope packing. The eyes are buggy curtain buttons, and she has a cape made of a piece of buggy curtain.

"John's head, body and limbs are the same as Samantha's, his feet are two spools of wire, his arms and hands are can openers, he has a coat made of rainbow sheet rubber packing and collar of rawhide and necktie of asbestos rope packing. He has a sand paper cap with staging band around it. His pants are made of lamp wicking. By leaving a slight opening between the steeper and the lid the mouth is formed.

"The body and seat of the buggy in which they ride are bread pans, the seat back is a chair bottom, the arm rests are No. 8 wire, the springs are made of one-half iron bent into proper shape. The axles are gas pipe, the wheels are pot lids, with reducing couplings for hubs. The fifth wheel is formed by the union of a mule shoe and a window pulley. The reach connecting the fore and hind axle are No. 9 wire, the steps are hoop iron put into proper shape. The shafts are two buggy bows sockets joined together by a cross bar of steel hinges. The single-tree is an extension rule, the dash-board is made of emery paper, the body and legs of the horse are made of black rubber sheet packing with reducing couplings for feet. The head is a lemonade shake and eyes gun wads, his ears a pair of strap hinges set on at proper angle, his mane and tail are of hemp packing. The tugs and breast strap of the harness are rope with pieces of rod packing for back band. The belly-band is wool twine, the back straps and crupper are small water hose a piece of hot water packing makes the hip straps, and a screen door spring is used for the breeching. Two key rings are used for bit rings, the lines are two sewing machine bands. The whip is a twisted piece of drafting paper with a whang lash.

"The crowning feature of the display is that every article used in this make up are things carried in stock. This display was made by Mr. William Kell, of Worden, Ill. Since having this photograph taken for you he has made a fence out of zig-zag rules and has a typical farmer sitting on the fence, watching Samantha and John pass by on their way to Scott Bros. store. This farmer's body is made of a can of liquid glue with brass rules for limbs, he has used a miner's lamp for the head, made his eyes of two small nuts, his arms and hands are made of mucilage brushes. He wears a red rosin paper coat and blasting paper hat. This display is attracting a great deal of attention."

RETAIL HARDWARE DOINGS.

NEW FIRMS.

Parkersburg, W. Va.—Rector Bros. & Rardin Co.; capital stock, $50,000.

Schulykill Haven, Pa.—Frank Starr & Geo. W. Beddell.

Reading, Pa.—The Geo. C. Unger Hdw. Co.; capital stock, $50,000.

Texarkana, Texas.—The Timber Lake Hdw. Co.; capital stock $20,000. Incorporators: E. D. Dyer, W. C. Timberlake, J. E. Morris and Will B. Stuart.

Scotts Bluff, Neb.—King & Hall.

Dayton, Ore.—J. L. Castle.

Yorkville, S. C.—Yorkville Hdw. Co.; capital stock, $8,000.

New Orleans, La.—The Jensen Hdw. Co., Limited.

Urbana, Ohio.—Grant Nincehelser.

Evergreen, Ala.—The Dun Hdw. Co.; capital stock, $10,000. Incorporators: Henry W. Dunn, S. J. Robertson, C. P. Deming and D. E. Witherington.

Sauk Rapids, Minn.—F. J. Baker.

Newton, Newton County, Miss.—Chambliss Hdw. Co.; capital stock, $25,000.

Lovilia, Iowa.—D. H. Rouse.

Brownwood, Texas.—Cooper-Broad Hdw. Co.; capital stock, $25,000. Incorporators: W. J. A. Cooper, J. T. Cooper and Howard Broad.

University Place, Neb.—W. H. Wineland.

Edwardsville, Ill.—Linder & Vignia.

Benson Village, Neb.—A. H. Heyden & Bro.

Oxford, Ohio—Mr. Whaley.

Savannah, Ga.—The Osborne-Marlow Co.

Lynn, Ind.—Warren Spitler and Wm. Cloppert.

Brayton, Iowa—J. P. Pendixon.

Fort Scott, Kas.—S. O. Spencer.

Lawrence, Kas.—Ernest & Kennedy.

Nacogdoches, Texas—Richardson, Seale & Co.

Live Oak, Md.—Suwanee Hdw. Co.; capital stock, $25,000. Incorporators, J. S. Roof, H. H. Hair, R. E. McNeil and J. W. Register.

New Orleans, La.—The Jensen Hdw. Co., Limited.

Echo, Ore.—L. W. McAdam.

Newton, Miss.—The Chambless Hdw. Co.; capital stock, $25,000.

Indianapolis, Ind.—Freiburger Hdw. Co.; capital stock, $10,000. Incorporators, J. Freiburger, Mary A. Freiburger and Marvin A. Koester.

Austin, Tex.—The Wilson Brothers Co.; capital stock, $20,000. Incorporators, E. M. Wilson, J. J. Wilson, W. K. Middleton and J. L. Dunn.

Edgar, Marathon County, Wis.—The Marquardt Hdw. Co.; capital stock, $10,000. Incorporators, J. E. Marquardt, C. C. Barrett and M. D. Rosenberry.

Pensacola, Fla.—Gordon & Brown Hdw. Co.

University Place, Neb.—Howard M. Wineland.

Bloomington, Ill.—The McComb Bros.

Jellico, Tenn.—Jellico Hdw. Co.

Washington, N. C.—The McKeel Hdw. Co.; capital stock, $100,000.

Atlanta, Ga.—Pearson Hdw. Co.; capital stock, $3,000.

Burlington, Ia.—John Selzer.

Lexington, N. C.—The Springs Hdw. Co.; capital stock, $10,000. Incorporators, H. H. Springs, R. C. Springs and F. E. Springs.

Doniphan, Neb.—G. B. Hak.

BUSINESS CHANGES.

North Bend, Neb.—Gauhan & Farrell succeed W. M. Orr.

Milford, Neb.—D. G. Erb succeeds Erb & Warnke.

Dannebrog, Neb.—M. A. Madson succeeds C. T. Krough.

Greenwood, Neb.—Charles & Paul White succeed E. H. D. Voorhees.

Tobias, Neb.—Moore & Adams succeed F. M. Phillips.

Breckenridge, Mo.—Wm. C. Sadler succeeds Wm. Gray.

Orange City, Ia.—De Cook, Brink & Co. succeed De Cook & Co.

Verona, Mo.—A. M. Sherwood succeeds the Verona Hdw. & Implement Co.

Ashdown, Ark.—The Ashdown Hdw. Co. succeed Briant Bros.

Llano, Tex.—John A. Chism & Co. succeed John A. Chism.

Carson, Ia.—A. C. Sivers succeeds E. A. Fountain.

Cripple Creek, Colo.—Victor Hdw. Co. succeed J. F. Donnelly.

Athol, Kan.—C. E. Moore succeeds Hudson & Moore.

Palmer, Kan.—C. E. Meyer & Co. succeed Henry Dittmer.

Gowie, Ia.—Johnson & Klippel succeed the Johnson Hdw. Co.

Jamestown, Mo.—Fullrich & Weisser succeed Fullrich & Gentysch.

Lincoln, Neb.—The Trester Hdw. Co. succeed A. E. Crosby.

Lovilla, Ia.—D. H. Rouse succeeds Castner, Cole & Co.

Savannah, Mo.—Whiteford & Townsend succeed McLean & Whiteford.

Burlington, Ia.—The Popular Hdw. Co. succeed Wm. Brand.

Centropolis, Kan.—W. D. Wartz succeeds W. D. Bonhart.

Sweetwater, Tenn.—Guthrie, Bradley & Jones succeed Guthrie, Bradley & Co.

Wheaton, Kan.—M. J. Gallagher succeeds Louis Bothl.

Cameron, Mo.—Hendrix & Burris succeed Craig & Hendrix.

Danville, Ill.—John Kavanaugh succeeds the J. B. Hoilman Hdw. Co.

St. Charles, Ill.—Hoagland & Nord succeed F. C. Hunt & Co.

Hoopeston, Ill.—Charles H. Flagg succeeds O. D. Bearss & Co.

Moundsville, W. Va.—Isaac Williams succeeds E. C. Rogerson.

Carlinville, Ill.—L. O. Haywood succeeds J. A. Wooley.

Portsmouth, Ia.—Cooper Bros. succeed C. M. Walker.

Grand Junction, Colo.—The S. R. Voils Hdw. Co. succeed A. M. Bucklin.

Memphis, Tex.—Gray & Hudgins succeed Berry & Hudgins.

Victor, Colo.—Victor Hdw. & Supply Co. succeed W. J. Donnelly.

Huntsville, Tex.—Keeland & Moore succeed W. W. Randolph.

Richfield, Utah—Young & Jensen succeed Meeter Bros.

Onawa, Ia.—Abild & Woodburn succeed Johnson & Abild.

Baileyville, Kas.—J. G. Eigenman succeeds D. T. Timberlake.

Lowry City, Kas.—Davis & Son succeed Davis & Marlsley.

Wynoka, Okla.—Frauley & McGurn succeed Murrow & Murrow.

Albia, Neb.—W. H. Davis succeeds E. J. Batte & Son.

Pender, Neb.—Crellin Bros. succeed Henry Bayer.

Havensville, Kas.—Logan Bros. succeed Fred Day.

Keswick, Ia.—R. B. Hull; discontinued.

Plover, Ia.—Chas. M. Godwin succeeds W. A. Neelan.

Anderson, Mo.—H. J. Chapman succeeds Chapman & Smith.

Vancouver, B. C.—L. E. P. McAden succeeds McPhail & Co.

Adrian, Mo.—W. S. Switzer succeeds O. D. Pearce.

Weiser, Ida.—Taylor Hdw. Co. succeed Opp & Davis.

Centropolis, Kas.—B. W. Barnhart; discontinued.

Galesburg, Ill.—D. K. Gowell; discontinued.

Phillipsburg, Mont.—Mrs. A. McIntyre; discontinued.

Camden, Mich.—The McKinleys succeed Z. McKinley.

Girard, Ill.—J. W. Clar & Co. succeed J. W. Bostem & Co.

Cameron, Mo.—Hendrix & Burris succeed Craig & Hendrix.

Claremont, Mich.—The Claremont Hdw. Co. discontinued.

Athol, Kas.—C. E. Moore succeeds Hedson & Moore.

Palmer, Kas.—C. E. Meyer & Co. succeed Henry Dittmar.

Henderson, Minn.—Groetch & Heberle succeed J. W. Groetch.

Savannah, Mo.—Whiteford & Townsend succeed McLean & Whiteford.

Wheaton, Kas.—Mrs. M. J. Gallagher succeeds Lewis Bothi.

Heating and Ventilating

A NEW DUST BOX.

The accompanying illustration shows the new dust box, now supplied with the American steel plate furnaces manufactured by the American Furnace Co., 1911-1915 Pine street, St. Louis, Mo. This dust receptacle is cast in one piece with a reversible clean-out. It may be attached on either end. It will be furnished at the same price as the steel box.

This new feature of the American steel plate furnace and the many others which have helped to make it one of the most successful steel furnaces on the market will be fully described by the American Furnace Co. upon application. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

A New Dust Box.

IDEAL FURNACE.

When a man sets out to make money he soon finds it necessary, if his purpose is to be accomplished, to give up pleasure. If pleasure is his one pursuit, he soon finds honor, wealth and health hanging in the balance. If a man desires health, hygienic laws will soon compel him to restrict his diet, to take the proper amount of exercise each day and to obey nature's laws in other directions. Something cannot be acquired from nothing. With each attribute added, an attribute is lost.

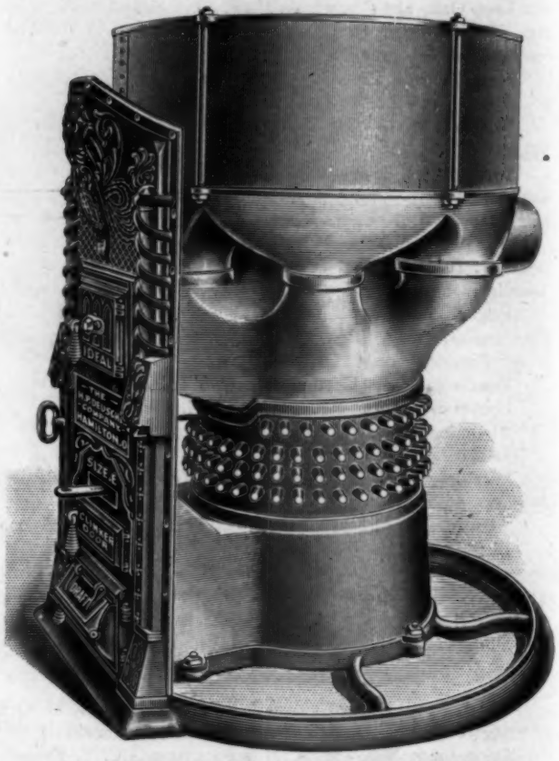
In respect to hot air furnace heating three essentials are recognized as necessary—effectiveness, economy, hygiene. A marked development of the first and last characteristics leads to a decrease of the second. A curtailing of the price item usually means a loss in either affectiveness or healthfulness. A certain balance exists confessedly and must be maintained. The object of furnace manufacturers is to make the relation between expense and virtue as pleasing as possible to the customer, and to decrease the former and increase the latter by improvements.

Improvements in the manufacture, in the machinery, in the workmanship, in the material going into production and in other items have enabled manufacturers to decrease the expense item tremendously within the last few years. In some cases this item has actually lowered, and in others concomitant improvements of a like degree have been made in the furnace.

The H. P. Deuscher Co., of Hamilton, Ohio, have expended their efforts towards the increase of the affectiveness and healthfulness of the Ideal furnace, but have not forgotten the economical features. Their object is to produce a furnace unequaled for comfort, health, convenience, economy and ventilation.

They call attention to the ash pan of the Ideal. Where the dump bar comes through the ash pan it is thickened to a diameter of over two inches, and in that thickness there is located a packing gland, exactly like those used for the piston rods of locomotives. The interior of this gland is packed with asbestos fibre and the outside washer is bolted down tight on the packing. This insures a perfect connection which is said to be absolutely dust-proof and gas-proof. Hence none of the elements of combustion can escape in the air chamber and only the pure, fresh, warm air enters the rooms.

The manufacturers direct special attention to the fire-pot, which is said to rest at a proper angle for the perfect combustion of fuel. The angle is outward instead of inward. This feature is said to insure the durability of the fire-pot and the economy of fuel. The radiator is of an enormous size. It is said to be absolutely air tight and to be impervious to gases. The diaphragm projecting from the middle casing ring is said to be an innovation. The fresh air coming in from the bottom strikes the slanting top of the diaphragm and is thence deflected towards the heated castings. This the manufacturers claim insures a thoroughly and perfectly heated air.



Ideal Furnace for Five to Eight Room Dwelling.

The H. P. Deuscher Co., of Hamilton, Ohio, will be pleased to furnish additional information and their interesting catalogue to dealers upon request. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

PHILLIPS HOT WATER HEATER.

The same bitter struggle now on in the hot air furnace field, respecting the merits of steel and cast iron for constructive purposes, is being waged in the steam and hot water departments. The Great Western Heater Co., of Des Moines, Iowa, proudly proclaim the fact that the Phillips heater, the product of their genius, is made almost entirely of cast iron. They call attention to the fact that deterioration in heating apparatus takes place almost entirely during the months when the heater is not in use. Corrosion destroys steel and wrought iron at such times much more quickly, according to their announcement, than cast iron. In selecting this latter material for the construction of the Phillips heater, the Great Western Heater Co. believe that they are producing something

Sectional View.

which will be much more durable, hence more economical to the user.

The construction of this heater is shown in the accompanying illustration. Figure 1 is the center pipe, which is said to double the capacity of the fire. This pipe receives the return water from the radiator and passes it up through the center of the fire—the hottest place. This, according to their announcement, is the exact spot where the blacksmith would place his iron to make it white hot. It is said to have four times the heating capacity of an equal amount of side surface. Figure 2 shows the cross section. This brings the water from the outside shell to the center and increases the rapidity of the flow. Figure 3 shows the hollow water-filled plate retarding the direct draft and producing great heat in the water. Figure 4 shows the connections between the center pipe, cross section and baffle plate to the dome. Figure 5 is the return pipe to the outer shell from the radiators. Figure 6 is the return pipe to the center pipe.

An examination of this sectional view is said to show that there are no flues to fill with soot; that there are no packing joints, no dead water space, no stripping of threads from contraction and expansion, no rigid cross section to break from expansion and contraction. There is said to be a full, free flow of water with a rapid circulation.

The Great Western Heater Co., of Des Moines, Iowa, will be pleased to furnish additional information upon request. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

THE WISE CATALOGUE.

The Wise catalogue for 1905, published by the Wise Furnace Co. of Akron, Ohio, goes into the subject of Wise furnaces in an interesting and comprehensive way. It must be pleasing for the manufacturers of this furnace to realize that, in spite of the fact that this heating apparatus has been on the market for only a short time, during the month of January, 1905, more than fifty strong letters testifying to the satisfaction, economy and durability which are so closely connected with the Wise furnace were received. The growth and progress of this concern have been most remarkable, and offer evidence of the fact that the manufacturers have struck the popular idea in furnace construction and have contributed much toward raising the standard. Wise furnaces were designed especially for durability, economy, simplicity, capacity and general every day results. Their efforts have been of a practical, rather than a theoretical, nature.

One of these interesting catalogues will be sent to members of the trade upon application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

"A QUESTION OF HEAT."

"A Qustion of Heat" is the title of a booklet recently published by the Kelsey Heating Co. of Syracuse, N. Y. The purpose of the booklet is primarily to direct attention to the Kelsey system of heating and ventilation as applied to schools and other public buildings. A special type of heater is necessary for buildings of this type, and the Kelsey Heating Co. have made a careful study of the subject. The Kelsey generator which is said to be entirely different from the ordinary hot air furnace is specially adapted for the heating of public institutions. In order to stimulate the use of the Kelsey for these purposes, the Kelsey Heating Co. have organized a special school heating department with competent engineers. These engineers will furnish detailed plans and specifications for either the gravity or mechanical systems of heating and ventilating. If the dealer prefers, one of the firm's representatives will call and inspect the buildings and submit estimates.

"A Question of Heat" goes into this subject quite deeply, explaining what points should be attended to carefully in the heating and ventilating of large buildings, explaining what good heat and what good ventilation mean, the good and bad points of the mechanical and the gravity systems and how the Kelsey Warm Air Generator meets all requirements.

Tinshop

Principles of Intersection.

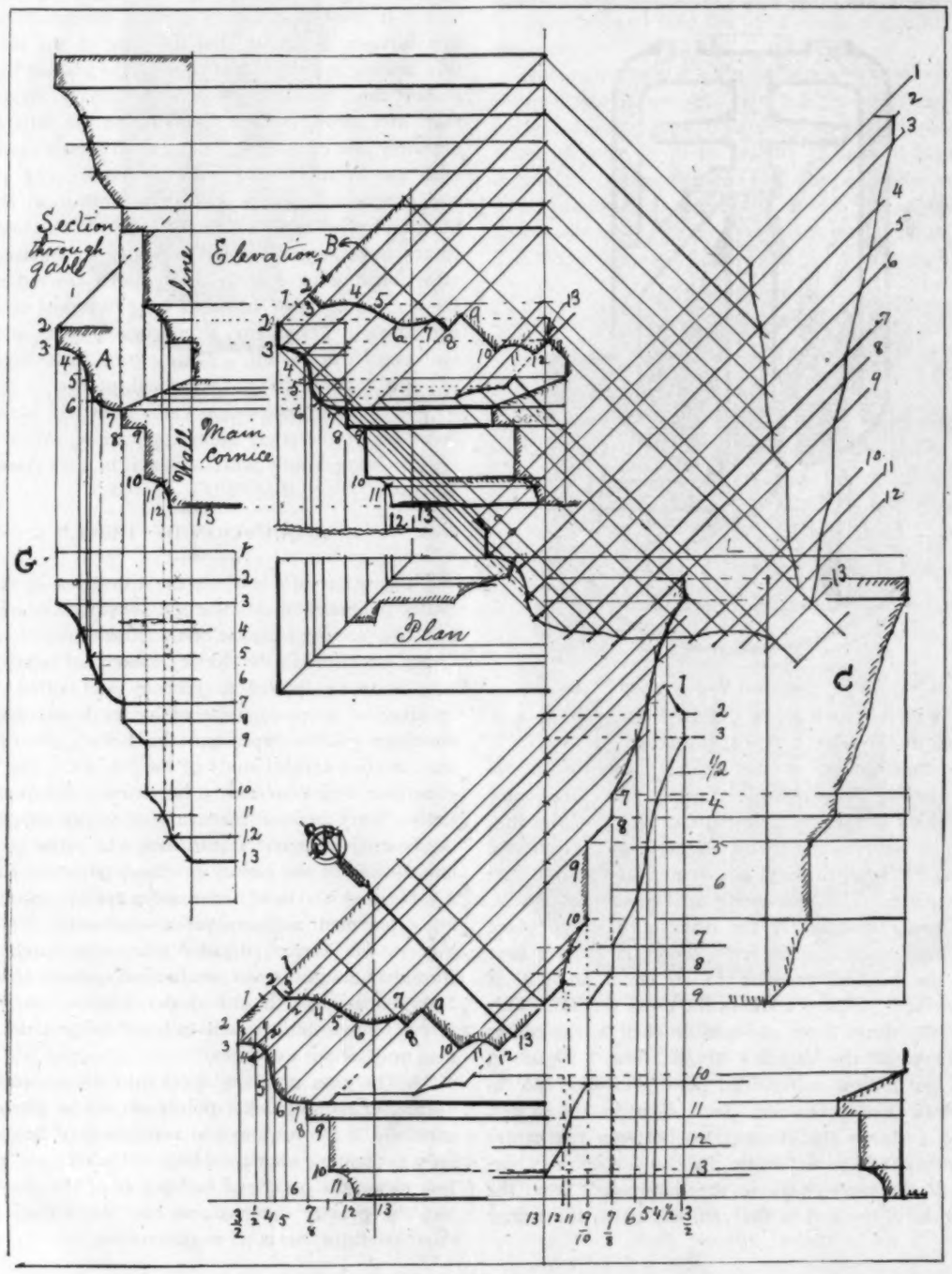
PART XV.

[Copyright, 1905, by Joseph P. Coleman.]

PLATE IV. FIG. I.

DEVELOPMENT OF PATTERNS.

Note—Every pattern for a moulding mitre is obtained in about the same manner. You can draw the development line on any convenient space on the paper. The development line is spaced off into points to correspond with the distances between the points on the surface of the mould. Lines are drawn to cross other lines in points. Lines are drawn through the last named points to obtain the form of the pattern. All this part of the operation is identical in every problem. In the drawing, I drew the line through point 1 at random, in the pattern line, parallel to the



pitch of gable, then I extended the wall line of gable mould B, drawn through point 13, base of mould, indefinite. On this indefinite line the distances between the points on mould B were spaced off commencing with point 1. Those points are numbered 1 2 3 4 5 6 7 8 9 10 11 12 13 as shown on drawing. I numbered the lines as shown on drawing so as to see the figures when I used the Tee-square and triangle in drawing the lines from the points on the surface of the return mould, and from the points in the gable cutting line, to meet the pattern lines in development. To obtain any pattern form or shape of the mitre pattern, you must draw a line from a point in the moulding or cutting line to the point on the pattern line containing the same number and make a point. In practice you can draw a short line crossing the pattern line, mark the point where the lines cross, every point of intersection being marked, you can then join the points and show the form of the pattern. In the drawing the lines from the face of the return mould-ogee are numbered 1 2 3 4 5 6 7, those lines cross pattern lines 1 2 3 4 5 6 7, as shown. Now I must explain how you obtain the shape of the intersection of mould B on the inclined plane as shown in elevation, a plan view is also shown. This can be done in various ways as every expert cornice cutter well knows. The simplest way is to draw lines from the points in mould A, numbered 7 8 9 10 11 12 13 to meet the inclined line in points. Then draw horizontal lines through the points on the inclined plane to cross lines in the gable. No. 7 in the inclined plane crosses line 7 at base of ogee in the return mould in the gable. No. 8 horizontal line is identical with No. 7 horizontal line. It crosses line 8 in the gable. On the face of the fillet member, as shown in plan, No. 9 horizontal line crosses line 9 in gable, top of facia. No. 10 horizontal line is identical with No. 9 and crosses line 10 in gable, bottom of facia. No. 11 horizontal line crosses line 11 in gable. No. 12 horizontal line crosses line 12 in gable. No. 13 horizontal line crosses line 13 in gable. Lines through the points 10 11 12 give the form of the intersection of mould B and the inclined plane. Lines already drawn joining 7 to 8, No. 8 to 9, No. 9 to 10, No. 12 to 13, by construction of the intersection.

DEVELOPMENT OF PATTERNS CONTINUED.

Lines are now drawn from the *form* of the intersection of mould B with the inclined plane as shown to cross the pattern lines.

The line drawn from 8—face of fillet, in the gable. —crosses line 8 in the pattern sheet. The line from 9 is a little higher than 8 in the gable. This line crosses 9 in the pattern sheet, the line from 10 in the gable is on the same level line as 9. It crosses 10 in the pattern sheet. In the pattern the line joining 9 to 10 is level. It is parallel to ground line. The line from 11 in gable crosses 11 in pattern sheet. Line from 12 in gable crosses 12 in pattern sheet. Now join 10 11 12 in pattern showing the shape of curve line from 13 in gable crosses 13 in pattern sheet. Join 12 to 13 in pattern, allow a flange below 13 to rivet panel. Trace lines through points not previously joined completing form of pattern from the intersection of mould B with the ogee-mould A, return mould and the inclined plane at the base of gable, cut a piece of sheet metal the shape of the square-mitre pattern, mould A. Cut also a piece of sheet metal the shape of the pattern for mould B, which has just been completed, form pattern A to mould A. It should be formed so as the mitre is at the right hand end of the sheet. Form pattern B to the raking profile B so as to join mitre A. When the two pieces of moulding are joined, mould A will be in a horizontal position as on a level brick wall. Mould B will be inclined at the required angle of elevation as shown and described. The plan view of the mouldings will be a right angle as shown. Again cut out two pieces of sheet metal from pattern mould B, the ogee part only, form them right and left, join the mitres, each ogee mould will be equally inclined in elevation, 45 degrees—the plan view is a right angle as before. This position is the same as a pinnacle mould on a square shaft. The shape of the moulds is not the proper shape for a pinnacle mould, but the principle is just the same. The shape cuts no figure with a cutting plane. The pinnacle intersection will be shown and described on another plate in the course of instruction. In projection drawing the problem just solved as shown on plate 5 would be stated. Two mouldings are to be joined to form a right angle in plan. One moulding is in a plane perpendicular to both planes of projection. The other moulding is in a plane perpendicular to the vertical and inclined to the horizontal at an angle of 45 degrees. The inclined moulding is partly intersected by a plane inclined to the horizontal as shown on drawing 22½ degrees. Make the representation on a drawing, construct intersections and develop patterns. The form of either moulding may be assumed. The position of the intersecting plane is known by the conditions of the problem.

INTERSECTION OF MOULD B WITH VERTICAL PLANE THROUGH CENTER OF GABLE.

The intersection of mould B at center line through gable in sheet metal cornice work can be stated as the gable-mitre. The pattern for this intersection is worked out precisely the same as any panel mitre or any gable mitre.

GENERAL CATALOGUE T.

General Catalogue T is the title of a 1905 catalogue, published by the St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn. This firm manufacture architectural sheet metal work, and are jobbers of sheet, tin plate and metal work supplies. At the head of their large plant are said to be practical men, who have been identified with the sheet metal industry almost from its inception in this country. Improved machinery, modern methods and a large business enable them to offer advantageous inducements.

One of the recent improvements in the plant is the addition of modern tank machinery, which enables the firm to fulfill all requirements in that direction. They announce that the steel ceiling trade for this season has been the largest in the history of their concern, though all of their departments show a gratifying increase over last year.

Their location in St. Paul is said to have an immense advantage for people who live in the West and Northwest sections of the country. Less time is consumed in correspondence, orders from dealers are promptly received and little time is required for goods to reach their destination. Their rates are lower than from Western points and the liability of loss or damage is said to be greatly reduced. This firm have abundant trackage facilities at their plant and track connection with ten different railroad systems. They believe that their shipping facilities should be taken into consideration by dealers who desire to give prompt service to their customers.

Part one of Catalogue T deals with eaves trough, miters, end pieces and drops, wire hangers, steel hangers, box gutters, roof gutters, conductor pipe, cast iron sewer connections and boots, conductor pipe, elbows and shoes, hangers, strainers, cut-offs, hooks, flanging hooks, stove pipe, roof ventilators, tee joints, stove pipe elbows, roof saddles, nails, tinners' snips, roofing tongs, riveting hammers, mallets, soldering coppers, wall anchors, soldering sheet fire-pots and corner beads.

Part two gives a careful description of the following specialties: Steel roofings (all styles), corrugated iron, curved corrugated sheets, corrugated arches, corrugated awnings, corrugated elevator sheets, rock faced stone siding, plain and rock faced brick siding, weather board siding, continuous rock faced stone, patented slip joint rock faced siding plates, pilasters and corner finish, rock faced window and door caps, slip joint casings, corrugated ridge rolls, caps and flashings, sheet copper, galvanized and black sheet steel, continuous ceiling and side wall plates, combination ceiling and side wall plates, tar kettles, galvanizing equipment, feed cookers, "Coat-Roid" roofing, building papers, tarred felts, "Valley brand" prepared roofing, metal flashings and valleys, metal shingles, metal tiles, metal lath, paints for exterior and interior steel, block tin, sheet copper, sheet zinc, tin plate, signs, galvanized steel tanks and cisterns, garbage cans, tank heaters.

Part three is generously filled with attractive cuts describing metal cornices, pediments, bay window finish, window and door caps, panels and gables, skylights, skylight guards, ventilators, chimney tops, ridge caps and finials, ridge starters, cresting blocks, ornamental ridgings, hip and ridge rolls, hip and ridge shingles, spun zinc and copper half balls, fluted half balls, circle mouldings, spun balusters, druggists' mortar signs, letters and figures, spun ornamental pieces, stamped and spun brackets, finials and vanes, terminals, crosses, bannerettes, cresting terminals and finials, urns, conductor heads, cast iron crestings and finials, ornamental horse, cow and rooster vanes.

Part four, the last and perhaps the most entertaining division, deals in galvanized sheet steel fronts, remodeling fronts of old buildings with rock faced steel ornamentation, patent fireproof cement filled walls, fireproof doors, fireproof windows, wired glass and fireproof shutters.

Enclosed in the catalogue, we find a simple and lawful recipe for making dollars out of sheet metal. The methods advised are ordering from a jobber who carries a big stock, and who is thus enabled to offer a large variety at attractive prices. The dealer is also advised to take up some of the numerous sheet metal specialties, such as cornices, steel ceilings, roof ornaments, fireplace doors and windows, which are said to be as easily sold as a keg of nails. The St. Paul Roofing, Cornice & Ornament Co. are willing to give useful suggestions to the local dealer.

A PROSPEROUS CONCERN.

The Wheeling Corrugating Co. of Wheeling, West Virginia, are one of the largest of the manufacturers of sheet metal products. Branch offices for this company are maintained in New York city, Chicago, St. Louis, Philadelphia, Boston and Chatanooga. A large stock of sheet metal goods is carried at all times, thereby insuring quick shipments and full orders. These goods are made in the mills of the company from start to finish. They are thus enabled to insist upon a high standard of quality and to see that this standard is maintained.

The Crescent steel lath is one of their most desirable products. This is made of steel sheets beaded every one and three-fourths inches to give stiffness to the sheet. The openings in the sheet are said to be ample to allow an easy passage to the plaster under pressure. They are guarded by an arch of metal which presents the plaster from going through too freely. This lath is painted on both sides with a special anti-rust coating. The Crescent steel lath is not expanded metal; the sheet possesses the full strength of steel, it is claimed.

This concern manufactures a large line of steel ceilings. Designs suitable for rooms ranging in size from that of a small vestibule to that of the largest court room, hall or church are carried in stock at all of their seven different warehouses. When durability, artistic decoration and price are considered, the Wheeling Corrugating Co. feel that the unsightly cracks, falling plaster, frequent repairing at an expensive cost, which invariably accompany the installment of a plaster ceiling, will be complaints of the past. The Wheeling ceilings are said to be fireproof and practically indestructible. They are designed for rooms of all kinds, are easily applied and are said to be moderate in price.

This firm also manufacture steel roll roofing, steel pressed standing seam roofing, crimped roofing, metallic shingles, tin roll roofing, galvanized sheets, conductor pipe, paints and cement, corrugated sheets and other articles of a like nature. Whitaker Old Style roofing plate is said to be the cheapest on the market when eventual cost is considered. Whitaker Old Style Redipped is made from carefully annealed black plate and carries, it is said, forty-seven pounds coating of pure tin and new lead to the 20x28 box. No wasters are sold.

The Wheeling Corrugating Co. make many other products which are fully described in their catalogues and circulars. They will be pleased to send descriptive matter to dealers upon request. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

NOTES AND QUERIES.

STEAM AND HOT WATER HEATERS.

From Stoddard Hdw. Co., Edgar, Neb.

Please give me a few names of manufacturers of steam and hot water heating plants.

Ans.—Craig-Reynolds Fdy. Co., Dayton, O.; Haynes-Langenberg Mfg. Co., St. Louis; Hart & Crouse Co., Utica, N. Y.; Monroe Fdy. & Furnace Co, Monroe, Mich.; Morgan & Co., Chicago; L. J. Mueller Furnace Co., Milwaukee, Wis.; American Radiator Co., Chicago; Boynton Furnace Co., Chicago; Detroit Heating & Lighting Co., Detroit, Mich.; Kewanee Boiler Co., Kewanee, Ill.; Richardson & Boynton Co., New York City; Thatcher Furnace Co., New York City.

MANTEL GRATES.

From "Critic," Indianapolis.

I should like to add the name of the Phillips Mantel & Clock Co., Grand Rapids, Mich., to your list of mantel grates manufacturers as given in the last issue.

STREET MAP.

From J. W. Whitlock, Libertyville, Iowa.

Where can we get a map of Chicago showing the streets and numbers whereby we could pick out in what block 1843 Blank St. is, etc.?

Ans.—Rand, McNally & Co., Chicago, publish a map.

GRAPHITE.

From Meier Bros., Henry, Ill.

Where can we buy graphite?

Ans.—Joseph Dixon Crucible Co., Jersey City, N. J.; S. Obermayer Co., Cincinnati, O.; National Paint Works, Williamsport, Pa.; Chicago Graphite Mfg. Co., Chicago; United States Graphite Co., 185 Dearborn, Chicago.

TOILET PAPER.

From "Reader."

Please give me a few names of toilet paper manufacturers.

Ans.—Albany Perforated Wrapping Paper Co., Albany, N. Y.; Geo. T. Johnson Co., 152 Lake St., Chicago; Morgan Envelope Co., Springfield, Mass.

TOILET PAPER HOLDERS.

From "Reader."

Please give me a few names of firms manufacturing toilet paper holders.

Ans.—Franklin Specialty Co., Reading, Pa.; Morgan Envelope Co., Springfield, Mass.; Albany Perforated Wrapping Paper Co., Albany, N. Y.

SPRING MOTORS.

From Hansen & Canfield, Woodbine, Iowa.

Who makes or sells spring motors?

Ans.—American Novelty Co., Stevens Point, Wis.; Fairies Mfg. Co., Decatur, Ill.

SCHILLING RANGES.

From the Born Steel Range Co., Cleveland, Ohio.

Kindly furnish us with the address of the manufacturers of Schilling steel and hotel ranges.

Ans.—Joesten & Schilling, 79 S. Robert St., St. Paul, Minn.

SELF-HEATING SAD IRONS.

From the Canton Fdy. & Mch. Co., Canton, Ohio.

We should like to add the name of the Monitor Iron Co., Big Prairie, O., to your last week's list of self-heating sad iron manufacturers.

[We have learned since that the America Co., Rockford, Ill., manufacture a gasoline self-heating sad iron also.—Ed.]

LEADER HYDRO-PNEUMATIC WATER SYSTEM.

From Cady & Forbes, Belleville, Mich.

In reply to query of F. W. Sanner, Tremont, Pa., in your Aug. 5th issue, would say that the Leader Iron Works, Decatur, Ill., make a pneumatic water system, probably the Leader Hydro.

OIL STOVES WITH FLUES.

From P. M. Zinsmaster, Navarre, Ohio.

Where can we buy an oil heating stove with two-inch or smaller stove pipe connection to ventilate the fumes into the chimney like a natural gas heating stove?

Ans.—We believe that no stove of the kind described is manufactured. The A. C. Barler Mfg. Co., 104 East Lake St., Chicago, guarantee their oil stoves against odor.

FLAGS.

From Black Silk Stove Polish Works, Sterling, Ill.

Kindly give us addresses of Chicago firms who sell wool bunting flags.

Ans.—Geo. B. Carpenter & Co., South Water St. and Fifth Ave.; G. F. Foster Son & Co., 174 E. Madison St.; T. C. Gleason & Co., 170 E. Madison St.; George Lauterer, 164 E. Madison St.

AMERICAN TRACKLESS PARLOR DOOR HANGERS.

From Perkins & Rosenfeld, Genoa, Ill.

Who makes the American Trackless Parlor Door Hangers?

Ans.—These were formerly made by Van Waggoner & Williams, Cleveland, O.

METAL FIREPROOF CONSTRUCTION.

From Berger Mfg. Co., Canton, Ohio.

Kindly give us name of manufacturer of metal fireproof construction.

Ans.—Northwestern Expanded Metal Co., Old Colony Bldg., Chicago; Bostwick Steel Lath Co., Niles, O.; Wheeling Corrugating Co., Wheeling, W. Va.

HAYES SKYLIGHT.

From F. E. Schmidt & Co., Gillespie, Ill.

Who makes the Hayes skylight?

Ans.—Geo. Hayes, 71 Eighth Ave., New York City.

ITEMS.

R. W. Brokopp, Gray's Lake, Ill., was a recent visitor at THE AMERICAN ARTISAN office. He announced business in his section of the country as quite satisfactory and acknowledged the expediency of tinners, otherwise idle during the summer, passing their leisure by making steel boats.

Alan W. Wood, the Pittsburgh steel man, died at New York City, Aug. 15, from appendicitis. He was about 55 years old, the son of W. Dewees Wood. With his father he had amassed a fortune while they were controlling the W. Dewees Wood Sheet Steel Co., which was taken over by the United States Steel Corporation. Mr. Wood had been married three times. His first wife was a sister of Senator Knox. They had one child. After her death he married Alberta Carrier, by whom he had six children. Several of these children live in Pittsburgh. Last year Mr. Wood married Goldie Lillian Mohr, actress and former member of the Weber and Fields comic opera company.

Trade Report.

CHICAGO IRON MARKET.

The demand for pig iron is better than a week ago, though the improvement is very slight and a weakening of prices was noted during the early part of the week under review. Inquiries came in in better volume and included one for nearly fifteen thousand tons of foundry iron from one buyer. The most interesting bit of news was to the effect that Rogers, Brown & Co. had decided to erect a new furnace in the South Chicago district. It is probable that this furnace will be used for the production of basic iron and that some of the plant will be devoted toward the manufacture of more finished products. The largest order of the week was from a St. Louis industry which bought twenty thousand tons of basic iron from an Alabama producer at $13.00, Birmingham. This price is a full dollar above the maximum Birmingham price for No. 2 foundry. There is a growing feeling that the United States Steel Corporation will enter the market heavily during September. This impression is gaining credence and serves materially to strengthen the local tone. Local furnaces seem to be well filled up with business and their indifference as regards orders is helping the Ohio furnaces who are at present invading the local market.

There is keen competition in the New York pig iron market, and though conditions are not bullish, neither buyers nor sellers exhibit any traces of apathy. One large steel company bought ten thousand tons at a slight concession during the week and a lively business was transacted in the irons containing a large proportion of silicon. Most of the orders were for spot shipments. There is little activity in the malleable Bessemer market. Injunctions were issued restraining the city of New York from making or executing any contract with the Pennsylvania Steel Co. for the construction of the New Manhattan Bridge across the East River. No reason was assigned as the cause for the granting of the temporary injunction and as it was well known the Pennsylvania Steel Co. was the lowest bidder on the more than fifty thousand tons of steel required for the erection of the bridge, the action created great surprise. The news that the Eastern Bar Iron Association had decided at its regular monthly meeting, held at the Waldorf-Astoria, Aug. 16th, to reaffirm the official price on iron bars, was another cause for great surprise. It was generally expected that the association would raise prices from ten to fifteen cents per hundred pounds. The members of the association will continue to charge unofficial premiums on rush orders.

The Boston pig iron market is very strong, although little of moment occurred during the week under review. There is no appreciable fluctuation of prices and many furnaces are sold up to their capacity. Buying is better than for some time past. The steel mills are still far behind on their deliveries, an enormous volume of business having been booked for this fall and winter. Structural steel continues to lead the market in regard to demand.

The Pittsburgh market was devoid of interest, but few sales having been reported within the last week. A considerable number of inquiries have been made, but little business was transacted. The demand from agricultural implement makers was reported as very active.

Little in the way of news comes from Cincinnati, both sales and inquiries being limited in volume and number. A moderate business is going on, mainly on the basis of $11.75, Birmingham. Strictly Birmingham irons are held at $12.00 for No. 2 foundry. There is more of pessimism in this market than in most of the others and it is currently believed that about three-fourths of the buyers in this territory could stay out of the market for the rest of the year.

There is little change to be reported in the sheet market, though when sentiment is considered there is a perceptible improvement. As last week, the demand is of good proportion, with prices quite ragged.

PIG IRON.

Rogers, Brown & Co., iron merchants, will say in their weekly report:

There has been little or no change in conditions which prevailed during the previous week, the buying being confined largely to small and medium sized lots for early delivery or for shipment throughout the balance of the year. Although no large orders were placed, the aggregate amounts to a respectable tonnage and some large inquiries are pending. The furnaces are not pressing for orders, for their order books are well filled and prices are being well maintained. Furnaces and coke operations are experiencing some trouble in obtaining an adequate car supply, and it is apparent that we are on the eve of the usual car shortage which exists each fall when the grain and cotton movement takes place. This is going to retard the movement of pig iron shipments and delivery of raw material to the furnaces.

There is a perceptible improvement in coke. There has been a general moving up in prices. This refers particularly to the Wise county (Virginia) and Pocahontas fields. The ovens in those districts are unable to supply the demands being made upon them, although there has been some improvement in the labor situation, which has resulted in a somewhat larger output.

Matthew Addy & Co., iron merchants, will say in their weekly report:

Business is decidedly brisker. At the present time in the pig iron market there are two distinct features in the trade. The first is the steady and satisfactory demand for small lots for prompt shipment in particular. There are excellent sales of this kind for high grade southern foundry metal. These range from 500 ton lots down to carloads, and cover all kinds of iron. This demand shows conclusively that in spite of the large purchasing movement in July many consumers did not cover fully. It also shows that general business is exceedingly good. The second feature in the market is the heavy inquiry for forward delivery. This demand of course comes principally from very large consumers, and is for considerable quantities, as, for example, one maker of large machinery has just purchased to the extent of 6,000 or 7,000 tons. Delivery in this particular case is over the first quarter of next year. This is about as far ahead as sellers are will-

ing to go, although some buyers are asking for shipment over the first half of 1906. Charcoal iron is selling freely, one large maker of car wheels having just purchased 3,000 tons, while a number of lesser lots have also been taken.

At the present time there are numerous good inquiries for various kinds of iron in process of negotiation, and the situation is all that could be desired. Shipments are being made to-day in greater volume than at any time during the year, and prospects all point to an unusually good fall trade. As a matter of fact there is not an unlimited quantity of iron available for sale, and already consumers have been obliged in several cases to change their specifications, not being able to find available exactly what they wanted.

There are good sales of coke, and the trade in this article is normal.

SHEETS.

John McVoy & Co., Chicago report as follows:

The outlook at the present time is very encouraging. The buyers are coming into the market, and there are quite a number of orders being placed for spot shipment. Raw copper continues to advance and consequently sheet copper is becoming stronger every day, and it may not be long before there is an advance in price on sheet copper. Galvanized sheets remain steady.

We quote the following prices for shipment from Chicago in ordinary lots. Large buyers are able to shade these figures somewhat.

Black sheet steel No. 16 gauge, $2.55; No. 18-20 gauge, $2.60; 22-24 gauge, $2.65; No. 26 gauge, $2.70; 27 gauge, $2.75; 28 gauge, $2.85; 29 gauge, $3.05.

Wood's smooth—20 gauge, $2.90; 22-23 gauge, $2.96; 26 gauge, $3.00; 27 gauge, $3.06; 28 gauge, $3.15.

Polished sheet steel—24 gauge, $4.85; 26 gauge, $4.95; 27 gauge, $5.05; 28 gauge, $5.15.

Galvanized sheets, regular sizes, 14-16 gauge, $3.00; 18-20 gauge, $3.10; 22-23 gauge, $3.20; 26 gauge, $3.45; 27 gauge, $3.60; 28 gauge, $3.82½; 29 gauge, $4.30; 30 gauge, $4.75; 36 inches wide on No. 20 and lighter, 20c per 100 lbs. advance. Sheets other than 8-ft. lengths take a slight advance over above figures. On 48-inch wide material, either 96 or 120 long, 16 gauge, $3.90; No. 18 gauge, $4.20; 20 gauge, $4.85.

Corrugated, 2½-inch ptd. No. 28 gauge, $2.15 a square.

Galvanized, $3.25 per square.

Sheet Copper, 19c base.

Solder, warranted, 50-50 at 19½c per lb.

CHICAGO HARDWARE MARKET.

The past few days has shown a decided improvement in demand and the opinion is freely expressed that the summer ebb has arrived and the conditions will improve from now on. The buying of fall goods has commenced and it seems evident that the retail dealers throughout the country expect a prosperous season. Manufacturers report that the demand from jobbers is in line with their expectations, exceeding them in some cases. There is a notable increase in mail orders coming to jobbers indicating as it does that stocks are low. The yellow fever in the South has led to the most stringent regulations, and it is well-nigh impossible to ship articles through the quarantines. This difficulty is disappearing, however, along with the mitigation of the plague.

Conditions of the southern part of the country are not so prosperous as those of the northern, mostly because of the very heavy rains which have visited all sections, especially those of the South. The amount of building and constructive work going on in the states below the Mason & Dixon line compares very favorably with the vast proportion of the structural work in the North and East. In addition to large structures, banks, office buildings, hospitals, a great many small houses and stores are being erected. The far West reports a very pleasing number of orders during the last month, though the amount of business was not at all excessive. The weather has been very favorable, and prices for food products will bring a substantial reimbursement to the farmers. The Lewis & Clarke Exposition is doing much for this section of the country.

Wire and wire nails show pleasing statistics, the volume of business done by the local jobbers being ahead of that for a corresponding period of the previous year. Concessions can be secured by the large jobbers on large orders. In spite of this fact there are rumors of an advance in prices.

PIG TIN.

The pig tin market presents quite a contrast to that of a week ago when all price records were broken and local importers and dealers raised their prices to over 33c. Conditions are now quiet and buyers are shy. There is always a natural antipathy to a declining market and the impression prevails that tin will go back to normal conditions, which are far below the present scale of value. The London market shows a corresponding recovery from the bullish movements of a week ago, and prices are from one pound to two pounds lower. Quotations are from 32.25c to 32.70c for spot deliveries. The market was easy with these quotations. The total arrivals for the month are nine hundred and eight tons.

OLD MATERIALS.

The Illinois Central, Sante Fe and Rock Island roads disposed of lists aggregating almost four thousand tons during the week under review. The Chicago, Milwaukee & St. Paul has a list of about two thousand tons. All of these lists were taken up quickly at prices somewhat higher than a week ago and a great deal higher than those of two weeks ago. Buying by consumers continues light, but speculation between dealers has created very strong sentiment.

The following quotations are per car lot and greater:

Old Iron Rails	$19.00 to $19.50
Old Steel Rails, 4 feet and over	14.25 to 14.75
Old Steel Rails, less than 4 feet	14.00 to 14.50
Heavy Relaying Rails, subject to inspection	23.00 to 23.50
Heavy Relaying Rails, for side tracks	19.50 to 20.00
Old Car Wheels	14.75 to 15.25
Heavy Melting Steel Scrap	13.00 to 13.50
Frogs, Switches and Guards	13.00 to 13.25
Mixed Steel	10.50 to 11.00

The following quotations are per net ton:

Iron Fish Plates	$17.00 to $17.50
Iron Car Axles	21.75 to 22.00
Steel Car Axles	17.00 to 17.25
No. 1 Railroad Wrought	15.50 to 15.75
No. 2 Railroad Wrought	14.50 to 14.75
Locomotive Tires, smooth	14.25 to 14.50
Railway Springs	13.00 to 13.50
Shafting	15.00 to 15.50
No. 1 Dealers' Forge	11.50 to 12.00
Wrought Pipes and Flues	11.25 to 11.50
No. 1 Cut Busheling	10.50 to 11.00
Iron Axle Turnings	10.25 to 10.50
Soft Steel Axle Turnings	10.25 to 10.50
Machine Shop Turnings	10.00 to 10.50
Cast Borings	8.50 to 8.75
Mixed Borings, etc.	8.25 to 8.50
No. 1 Mill	9.25 to 9.50
Country Sheet	8.25 to 8.50
No. 1 Boilers, cut to Sheets and Rings	10.50 to 11.00
No. 1 Cast Scrap	13.00 to 13.50
Stove Plate and Light Cast Scrap	10.75 to 11.00
Railroad Malleable	13.25 to 13.50
Agricultural Malleable	12.55 to 13.00

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box
IC	14x14	$10 50
IC	14x20	7 15
IX	14x20	8 40
IXX	14x20	9 60
IXXX	14x20	11 85
IXXXX	14x20	13 10
IC	20x28	14 50
IX	20x28	16 50
IXX	20x28	18 95
IXXX	20x28	21 35
IXXXX	20x28	23 75

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$9 00
Cokes, 200 lbs	IC	20x28	9 35
Cokes, 216 lbs	IC	20x28	9 75
Cokes, 216 lbs	IX	20x28	11 70

PIG IRON.

Lake Sup. Charcoal	$17 50@$17 75
North'n Coke Fdy., No. 1	17 00@ 17 25
North'n Coke Fdy., No. 2	16 50@ 16 75
North'n Coke Fdy., No. 3	16 00@ 16 25
Northern Scotch, No. 1	17 00@ 17 25
Ohio Strong Softeners, No. 1	17 30
Ohio Strong Softeners, No. 2	17 80
Southern Silvery, 4 to 6 per cent Silicon	16 65@ 17 65
Southern Coke, No. 1	16 15
Southern Coke, No. 2	15 65
Southern Coke, No. 3	15 15
Southern Coke, No. 4	14 90
Southern Coke, No. 1, Soft	16 15
Southern Coke, No. 2, Soft	15 65
Southern Gray Forge	14 65
Southern Mottled and White	14 40
Malleable Bessemer	16 00@ 16 75
Jackson Co. & Ky. Silvery 8% Silicon	19 80@ 20 30
Jackson Co. & Ky. Silvery 10% Silicon	19 80@ 20 30
Alabama and Georgia Car Wheel	20 15
Basic Iron	15 65@ 16 15

BLACK SHEET STEEL.

No. 16	per 100 lbs.	$2 55
No. 18-20	per 100 lbs.	2 60
No. 22-24	per 100 lbs.	2 65
No. 25-26	per 100 lbs.	2 70
No. 27	per 100 lbs.	2 75
No. 28	per 100 lbs.	2 85
No. 29	per 100 lbs.	3 05

POLISHED SHEET STEEL.

No. 24	per 100 lbs.	$4 60
No. 26	per 100 lbs.	4 70
No. 27	per 100 lbs.	4 80
No. 28	per 100 lbs.	4 90

SMOOTH STEEL.

Wood's Smooth, No. 20		$2 90
" "	No. 22-24	2 95
" "	No. 25-26	3 00
" "	No. 27	3 05
" "	No. 28	3 15

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. ...."A" $10 20, "B" $9 20

Dickey Planished Sheet Steel....8¼c

GALVANIZED IRON.

Regular Sizes.

No. 16, per 100 lbs	$3 20
Nos. 18 & 20, per 100 lbs	3 35
Nos. 22 & 24, per 100 lbs	3 50
No. 26, per 100 lbs	3 70
No. 27, per 100 lbs	3 90
No. 28, per 100 lbs	4 10
No. 30, per 100 lbs	5 00
Nos. 22 & 24 x 36 in., per 100 lbs	3 70
No. 26 x 36 in., per 100 lbs	3 90
No. 27 x 36 in., per 100 lbs	4 10
No. 28 x 36 in., per 100 lbs	4 30

SOLDER.

XXX Guaranteed ½ & ½...per lb.	20½c
Commercial ½ & ½ .....per lb.	19c
No. 1 Plumbers	17½c

SHEET ZINC.

600 lb. Casks	base, per cwt.	$7 90
300 lb. Casks	per cwt.	7 95
Sheets	per cwt.	7 70

COPPER.

Copper.....base, 21c

TIN PIGS AND BARS.

Banca, pigs, per lb	35@35½c
Straits, pigs, per lb	35c
Straits in bars, per lb	37c

LEAD.

American Pig	$4 60@$4 62½
Bar	6½c
National (White) brands (in less than 100 lb. lots), per lb	7½c

Sheet.

Full coils	per 100 lbs.	$7 00
Cut coils	per 100 lbs.	7 25

HARDWARE.

ADZES.

Carpenters'.
- Ajax.....35&15%
- Blood's.....40&2½%

Coopers'.
- Barton's.....20%
- White's.....15%

Ship.
- Ajax.....33⅓%
- Blood's.....37½%
- White's.....12½%

AMMUNITION.

Caps, Percussion—per 1,000.
- F. L. Waterproof, 1-10s.....40c
- G. D.....35c
- Eley's.....52c

Cartridges.
- Peters Rim Fire Ctgs.....50&3%
- Peters Cent Fire, Pistol and Rifle.....25&3%
- Peters Cent Fire, Military and Sporting Ctgs.....15&8%
- Peters Blank Ctgs. 22 cal.....$1 24
- Peters Blank Ctgs. 32 cal., C. F. 4 60
- Peters BB Caps, Round ball.. 1 50
- Peters BB Caps, Conical ball . 1 95
- Winchester Cent. Fire, Military and Sporting Ctgs....15&8%

Primers.
- Berdan Primers.....$1 00
- Peters Primers.....20%
- Winchester Primers.....20%

Shells.
- Peters Empty Paper Shells, 10 and 12 gauge. League..25&2%
- Peters Empty Paper Shells, 16 gauge. League.....20&2%
- Ideal Empty.....25&7%
- Peters Target and High Gun Smokeless.....40&6%
- Peters Premier and Ideal Smokeless.....40, 10, & 10%
- Peters Loaded Shells, League.....40&2%
- Peters Referee Semi-Smokeless.....40&2½%
- Winchester Blue Rivals.. 33⅓ &
- Winchester Yellow Rivals 11%
- Winchester Repeater.....40&5%
- Winchester Leader.....40-10&10%
- Winchester Loaded Shells, Black Powder.. 33⅓ & 11%

Gun Wads—per 1,000.
- Peters Gun Wads.....20%

Powder.		Each
King's Smokeless, kegs		$11 30
" "	½ kegs	5 80
" "	¼ kegs	2 97
" "	1-lb. cans	51
" "	1-lb. " rifle	70
Dupont's "	50-lb. drum	22 45
" "	25-lb. kegs	11 35
" "	12½-lb. kegs	5 80
" "	6¼-lb. kegs	2 97
" "	1-lb. cans	51

Shot.
- Drop shot, sizes smaller than B, 25-lb. bags, per bag.....$1 65
- Drop shot, B and larger sizes, 25-lb. bags, per bag.....1 90
- Buck Shot, 25-lb. bags, per bag 1 90
- Chilled Shot, 25-lb. bags, " 1 90

ANCHORS.

Expansion Screw Anchors.....10%

ANVILS.

Trenton, 70 to 80 lbs	9½c per lb
Trenton, 81 to 150 lbs	9½c per lb

ASBESTOS.

Board and Paper.....33⅓%

AUGERS.

Boring Machine.....60&10&5%
- Irwin's.....40&10%

Carpenters' Nut.....60&10&5%

Hollow.
- Bonney's—list $30.00.....75&5%
- Stearn's, No. 3..... " 33 50

Post Hole.
- Digwell, 8-inch..... per doz. 12 50
- Iwan's Post Hole and Well..40&5%
- Iwan's Vaughan pattern, 4 to 9-in., per doz..... 6 00

Rafting.
- Snell's.....50&5%

Ship.
- Ford's, with or without screw 40-5%
- Snell's, " " " 40-5%

AWLS.

Brad.
- Handled.....per doz. $0 28
- Shouldered, assorted, 1 to 4, ...per gro. 95
- Patent asst'd, 1 to 4.. " 90

Harness.
- Common..... " 1 10
- Patent..... " 90

Peg.
- Shouldered..... " 95
- Patent..... " 40

Scratch.
- No. 2, handled..... " 4 80
- No. 1, socket handled..per doz. 1 15
- No. 20 Hurwood..... " 2 00

Sewing.
- Common.....per gro. 90
- Patent..... " 90

AXES.

Boy's Handled.
- Camp Fire, 3 lb .....per doz. $6 25
- " " 4 lb., freighters', ...per doz. 7 85
- Cast Steel, good grade, " 6 25
- Pioneer..... " 6 75

Broad.
- Peerless..... 40-10&5%
- Red Warrior .....per doz. $22 50

Firemen's (handled)... " 13 00

Single Bitted (handled).
- Gladstone, 3 to 4 lbs., per doz. $10 75
- Hunt's " " " 9 00
- Lippincott's " " " 9 00
- Mann's " " " 9 00
- Pioneer " " " 9 75
- Valley Forge " " " 9 00
- Maricopa " " " 7 50

Single Bitted (without handles).
- Gladstone, per doz. 3 to 4 lbs. $8 50
- Hunt's " " 6 75
- Lippincott's " " 6 75
- Mann's " " 6 75
- Pioneer " " 7 25
- Valley Forge " " 6 75
- Maricopa " " 6 00

Double Bitted (without handles).
- Lippincott's, 3 to 4 lbs. per doz. $9 25
- Mann's " " 9 25
- Pioneer " " 9 25
- Valley Forge " " 9 25

The above prices on axes of 3 to 4 lbs. are the base prices.

3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$3.00	4.50	5.50	6.00

BALANCES, SPRING.

Frary's	50%
Pelouze	20%

BARS, CROW.

Pinch or Wedge Point.....cwt. $2 95

BASKETS.

Clothes.
- Small Willow .....per doz. $5 75
- Medium " ..... " 6 50
- Large " ..... " 7 25

Galvanized Iron. ½ bu. 1 bu. 1½ bu
- Per doz..... $4 00 5 50 7 00

BEATERS.

Carpet.
- Rattan.....per doz. $2 40
- Raymond's Steel Wire " 80
- Woven Wire, No. 4.... " 1 10

Egg.	Per doz.
o. 60 Imp. Dover	$0 60
No. 75 " "	65
No. 100 " "	75
No. 102 " " tinned	85
No. 150 " " hotel	1 50
No. 152 " " hotel tin'd.	1 75
No. 200 " "	80
No. 202 " " tinned	90
	Each
No. 300 " " mammoth.	2 50

BELLOWS.

Blacksmiths' 70%

Hand.
- 8 inch.....per doz. $6 95
- 10 inch..... " 8 40

Molders'.
- 13 inch..... " 13 00

BELLS.

Call.
- 2½ in. nickeled bell ...per doz. $1 85
- 2½ in. " brass bell " 3 60
- 3 in. " " " " 7 50
- 3 in. " silver alloy bell .....per doz. 17 00
- 4½ in. nickeled brass bell and base.....per doz. 14 50

Cow.
- Ordinary Goods.....70&5%
- High Grade .....60&10%
- Jersey .....70&10%

Door.
- Bigelow Automatic..per doz. $9 50
- Rotary.
- 3 in. bronzed iron bell " 5 25
- 3 in. nickeled " " " 7 50
- 3½ in. " " " " 9 00

Hand.
- Hand Bells, polished ...60@60&10%
- White Metal.....50%
- Nickel Plated.....40%
- Swiss.....60&5%
- Silver Chime 33⅓%

Miscellaneous.
- Church and School, steel alloy.....70, 10&5%
- Farm, lbs..... 40 50 75 100
- Each $1.10 1.30 1.85 2.65

BEVELS, TEE.

Stanley's, rosewood handle, new list .....40&5%

Stanley's iron handle.....40&5%

BINDING, OILCLOTH.

Zinc	75&10%
Brass	72½%
Brass Plated	75&10%

BITS.

Auger.
- Extra Double Spur .....70&10%
- Ford's Car and Machine....40&10%
- Ford's .....40&5%
- Ford's Ship..... 40&5%
- Irwin .....50&5%
- New Jenning's.....50, 10&10%
- Russell Jenning's.....25&10%
- Clark's Expansive.....60%
- Steer's " Small list, $22.00..30%
- " Large " $26.00..30%
- Irwin Car 45%
- Snell's Car.....60&5%
- " Ship .....40&5%
- Ford's " Auger pattern Car.....40&5%

Center .....40&10%

Countersink.
- Wheeler's .....per doz. $1 20
- American Snail head. " 70
- " Rose " " 80
- " Flat..... " 70
- Buck Bros.' Flat..... " 2 65
- German..... " 70

Dowel.
- New Jennings.....40&10%

Gimlet.
- Standard Double Cut 50&5@50&10%
- German Pattern .....per doz. $0 48
- Gouge ..... " 80
- Spoon ..... " 80
- Countersink ..... " 1 30

Reamer.
- Buck Bros.' ½ Round.. " 2 75
- " " Square. " 2 50
- Standard ½ Round .... " 75
- " Square ..... " 75
- German Octagon..... " 75

Screw Driver.
- Round Shank..... " 50

Round Shank, extra..
quality ..... " 1 40
Square Shank ..... " 1 10

BLACKING, STOVE. (See Polish)

BLADES, SAW.

Butchers'.
Standard ¾ & 1¼ in.....60&5%
Clock Spring.....60&5%
Star 15%

Hack.
Disston's .....25&5%
Griffin's.....35&5%
Star 15%

Wood.
Jackson's .....per doz. $2 25
Disston's—No. 6, 16, 26 & 045.. 4 25
No. 11 ..... 6 40
W. M. & Co 's No. 20..per doz. 5 50

BLOCKS.

Snatch.
Wooden .....55&10%
Steel .....40&10%

Tackle.
Wooden .....70&5%
Steel .....50, 10&5%

BOARDS.

Stove.....40%

Wash.
Globe.....per doz. $2 55
Banner..... " 2 90
Crystal Glass..... " 3 40
Brass King..... " 3 40
Nickel Plate ..... " 3 40
Enamel King..... " 3 40

BOBS, PLUMB.

Carpenters'.
8¼ oz. iron.....per doz. $0 65
1¼ lb. " ..... " 1 60
2¼ lb. " ..... " 1 80
13 oz. lead ..... " 3 00
6¼ oz. brass..... " 3 30

BOLTS.

Carriage, Machine, Etc.
Carriage ⅜x6 and sizes smaller and shorter.....75&5%
Carriage, sizes larger and longer than ⅜x6 .....70&5%
Machine, ⅜x4 and sizes smaller and shorter.....75&5%
Machine, sizes larger and longer than ⅜x12.....70&5%
Machine, longer and larger than ⅜x12.....70%
Elevator.....50-10&5%
Plow.....60&10%
Stove .....80&10%
Tire .....75&10%
Wagon Box Strap .....70&10%

Mortise Door.
Gem.....50&10%
Ives'.....50&10%

Barrel.
Cast 50%
Wrought .....50&5%
" Bronzed.....75&5%

Flush.
Wrought, B K .....40&5%

Spring.
Wrought .....75&10%
" Brass .....75&10%

Square.
Cast.....40%
Wrought .....60-10&10%

Tire.....72&¼%

BORERS.

Angular.
Miller's Falls..... per doz. $13 75

Bung.
Common ring with handle.
Inches..... 1¼ 1½ 2
Per doz..... $6.25 7.25 8.50

Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $2 00 each..25, 10 & 2¼%

BOXES.

Mail, No.... ..... 5 10 20
Per doz..... $3.50 10.50 13.00

Miter.
New Langdon.....15&5%
Olmsted's 10%
Stanley's.....30%
Seavey's .....each $1 30

BRACES.

Barber's .....50&10&10@60&10%
Fray's Genuine Spofford's 60%
..Fray's No. 70 to 120, 81 to 123, 207 to 414.....60%
C. E. Jennings & Co.....50&5%
Mayhew's Ratchet 60%
Mayhew's Quick Action Hay Pat. 50%
Miller's Falls Drill Braces. 25%

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1 per doz. $9 75
" No. 2 " 10 50

Shelf.
Cast Iron, Japanned.....50, 10, 5%
Stanley's Wrought Steel 70-10&2¼%
Wire .....80, 10&5%

BROILERS.

Wire..... .....70&10%
Crown, Self-Basting, No. 80. doz. $2 16

BUCKETS.

Pump Rubber.
Wychoff.....per gr. $4 75
Cooper..... " 4 75
Champion ..... " 7 50
Victor ..... " 9 25
Star..... " 5 00
IXL ..... " 6 75

Well.
Galv'd Qts..... 10 12 14
Per doz..... $2.90 $3.25 $3.40
Wooden, top ear, plain, per doz 3 75
" " swivel " 4 85
" side-strap, plain " 3 85
" " swivel " 4 95

BUCKS, SAW.

Folding .....per doz. $2 10

BURRS, RIVETING.

Copper Burrs only.....35-10&5%
Tinners' Iron Burrs only.....70%

BUTTS.

Cast Iron.....65-10&5%
Wrought Brass.....15%
Wrought Steel Bright—Nos. 800, 804, 808, 810, 814 and 834..75-10&10%
Nos. 838, 840 and 842....75-10-10&10%
Nos. 822 and 823.....35-10&7½%
Wrought Steel, Japanned.
Nos. 731 and 727.....70-10-10&10%

CALIPERS.

Double .....60&12½%
Inside and Outside.....60&5%
Wing..... .....60-10&10%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M.....$3 75

Toe.
Shoenberger.....per ℔ 5 c
Bessemer ..... " 4½c
American ..... " 7 c
Swedes..... " 8½c

CANS.

Cheese Factory Can Stock.
Gallons.... 15 20 30 40
Per set.... $2.85 $3.05 $3.25 $4.40

Milk.
Elgin Pattern.
Nos..... 808 810
Gals..... 8 10
Per doz..... $22.80 $24.60
New Elgin Pattern.
Eureka Pump, 5 gal.....$9 25
Wood Jacket.....50, 10&10%
Nos..... 105 108 110
Gal. each .. 5 8 10
Per doz.... $15.75 $18.00 $18.75
Iowa Pattern.
Nos..... 608 610
Gal 8 10
Per doz..... $21.00 $22.20
New York Pattern.
Nos..... 908 910
Gal. each..... 8 10
Per doz..... $25.15 $26.95

Oil and Gasoline.
1 Gal. glass, Daisy....per doz. $2 10
1 " cushioned " 3 15
Star, gals..... 1 2 3
Per doz..... $1.60 $2.60 $3.25
Per doz.
Sterling Tilting, 5 gallon.....$ 8 00
"High C" Pump, " 12 00
Eureka Pump " 9 25
Wooden Jacket.....60&10%

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS

Hay.
Myers' Imperial.....each $3 50
" Clover Leaf..... " 3 65

CARTRIDGES.

See Ammunition.

CASTERS.

Acme—Ball Bearing.....33½%
Bed.....60&5%
Common Plate.
Brass Wheel.....60&10%
Iron and porcelain wheels, new list. .....60&5%
Philadelphia Plate, new list..65&10%
Martin's.....50-10&5%
Payson's.....70&10%
Tucker's, Wood & Iron Wheel..25&5%
" Rubber Wheel.....15%

CATCHERS, GRASS.

Bieder's No. 1... .....per doz. $5 75
Eureka ..... " 4 25
Ideal No. 4..... " 10 50

CHAIN AND CHAINS.

Breast Chains.
Doubleslack.....doz. pairs $5 75
With Covert snaps. " 5 00
With slide..... " 3 25
Without slide..... " 2 85

Bright Ox Chains.
5/16 in. $7.25; ⅜ in. $5.45 per 100 lbs.

Cable Coil Chain.
Inch..... 5/16 ¼ 5/16 ⅜
Per 100 lbs.. $9.30 $6.50 $5.40 $4.60
Inch..... 7/16 ½ ⅝ ¾
Per 100 lbs.. $4.40 $4.30 $4.15 $4.05
Inch..... ⅞ 1 1¼
Per 100 lbs.. $4.00 $4.00 $4.10

Cable Log Chain.
Advance 35c per 100 lb. on Cable Coil

Cow Tie Chains.
American 2 toggle.....50&5%
" toggle and snap...50&5%
" open & closed ring, 50&5%

Halter Chains.
American, new list.....33½%
German.....60-10&5%

Niagara, new list.....40&5
Triumph, " 30%

Picture Chains.
Light Brass, 3 ft.....per doz. 63c
Heavy Brass, 3 ft..... " 75c

Pump Chain.
Galvanized, per 100 lbs.....$4 75

Safety Chain.
Brass.....60&10%

Special Steel Loading Chain.
Inch..... ⅜ 7/16 7/16
Per 100 lbs... $16.00 $13.50 $12.50

Stretcher Chains.
5/16 in. $8.50; ⅜ in. $7.75 per 100 lbs.

Tie-Out Chains.
Brown's .....70&10%

Trace Chains.
Western Standard.
6½— 6-2..... ...per pair 30c
6½— 8-2..... " 31c
6½— 8-3..... " 33c
6½—10-2..... " 38c
7 — 8-2..... " 38c
7 —10-2..... " 42c
7 —10-1 ..... " 48c
7 —10-0..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.

Wagon Stay Chains.
Inch..... ⅜ 7/16 ½
Per 100 lbs... $6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l Crayon..... " 5½c

CHARCOAL

In barrels.....per bu. 22c

CHECKS, DOOR.

Blunt 30%
Blum-Jap'd, $6.25; Brzd., doz....$7.00
Columbia.....50, 10&5%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box,
Inches..... 10 12 14
Round, per doz. $2.10 $2.25 $2.75
Flat " 2.85 3.60 4.20

Cold.
Good quality.....per ℔ 10@19c

Socket, Framing and Firmer.
Barton's.....20%
For beveled back, add per doz..60c

Tanged, Firmer.
With handles, add per doz.....60c

Choppers, Enterprise Meat.
No. 12.....$2 10
No. 22..... 3 40

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers.....per doz. $6 25
Yankee, for Yankee Screw Drivers..... 5 00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each.....$3.90 $4.15 $4.40
Belle, Barrel. 70%
Common Dash, Gal.. 4 5 6
Per doz.....$7.75 $8.50 $10.50
Hero.....70%
Union, Gal..... 5 7 10
Each..... $3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's.....30%

Carpenters'
Steel Bar.....25%

Hose.
Sherman's, brass, ¾ in., per doz..33c
Double, brass, ¾ in., " 65c

Saw Filers.
Disston's list, $30.00.....30%
Stearn's, No. 0, $3.50; No. 1, $11.50; No. 3, $5.50 doz.
Wentworth's.....40%

CLAWS, TACK.

Cast, wood hdle.....per doz. 45@60c
Forged steel, wood hdle " $0.80
Solid Steel..... " 1.60
Giant..... " .60

CLEANERS.

Drain.
Iwan's Adjustable.....55%
Iwan's Stationary.....40&5%

Pot.
Wire..... per doz. $0.55

Side-walk.
Steel..... per doz. $3.25
XLCR.....65&5%

CLEAVERS.

Family.
Ajax, In..... 6 7 8
Per doz..... $5.50 $5.75 $6.25

CLEVISES.

Malleable ....per ℔ 3½c

CLIPPERS.

Bolt.....$1.90@$4.75

CLIPS.

Axle.....65&5%

Damper.
Standard.....per doz. 65c
Troy..... " 38c

Hame..... " 20c

CLOTH.

Emery.
Ajax..... 50&10%
B. & A.....50%

Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft..$1 85
9 to 12 " " " " 2 15
2 to 8 " galv. " " 2 70
7 and 8 " " " " 4 25

Screen Wire.
12 mesh, painted, per 100 sq. ft..$1 25
14 " " " " 1 85

COCKS AND FAUCETS.

Compression Plain Bibbs...60-10-2½%
Lever Bibb Cocks.....70%
Compression Hose Bibbs.....60-10%
Telegraph Faucets (new list)...50-5%
Racking Cocks (new list).....70-5%
Compression Lock C'ks(n'w list)..70%
No. 65 Brass Liquor Cocks, doz.. $9.15
Andrew's Brass Faucets 70%
Angle Plug Faucets, per doz....$0.85
Milk Can Faucets, per doz...$2.60-4.20
Petroleum Faucets (new list)....70%

COLLARS, STOVE PIPE.

Inches..... 5 6 7
Plain Tin....per gro. $2.00 $2.35 $3.40
Japanned Tin " 3.20 3.45 4.50
Lacquered Brass " 2.55 2.90 4.00

COMBS, CURRY.

Nos 000 20 321 330 417 416
Per doz. $0.32 .80 .90 .95 .80 1.00
Nos 531 533 530 535 545 390
Per doz. $0.96 1.20 1.10 1.85 1.40 1.30

COMPASSES.

Carpenters'.....70%
Pencil—Faber's.....per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 ℔ .....per ℔ 31c
1½ ℔..... 28c 2 ℔.... " 27c
3 ℔ and larger..... " 25c

CORD.

Picture.
White Wire .....80-10&5%

Sash.
Baltic Braided Flax.....per ℔ 20c
Silver Lake, white 7-32 in. " 29c
" " " 8-32 in. " 23c

CORKSCREWS.

Humason & Beckley.....33½%
Walker's.....33½%
Williamson's Regular..... 50%
Williamson's Forged Worm.....50%

COTTERS, SPRING.

All sizes—new list.....90&10%

COUNTERSINK.

Buck Bros. Flat.....per doz. $2 65

COUPLINGS, HOSE.

Brass.....per doz. $1.00
Brass Plated..... " .85

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine...per doz $22.75

CRAYONS—See Chalk.

CROW BARS.

Pinch or Wedge Point, per 100 lbs. $3.00

CUTTERS.

Glass.
Red Devil 45%
Smith & Hemenway Co. 50%
Woodward 40%
Meat.
Enterprise Nos. 5, 10, 12, 22, 32 and 42 ..... 25%
No. 100, list, $18.00 ..... 40&10%
Nos. 2 and 4 ..... 25%
Universal... Nos. 1 2 3
Per doz $10.50 $12.50 $17.00
Smith & Hemenway Co 25%
Pipe.
Stanwoods... No. 1 2 3
Each $0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout ..... per doz. $9 75
1-knife Slaw ..... " 1 65
2-knife " ..... " 2 25
Washer ..... " 7 75

DAMPERS, STOVE PIPE.

Standard ..... 50&10%
American ..... 45&10%

DIES, STOCKS AND

Discount ..... 40&5%

DIGGERS.

Post Hole.
Acme ..... per doz. $8 75
Atlas ..... " 8 25
Eagle ..... " 5 75
Eureka ..... " 6 25
Hercules ..... " 9 75
Iwan's Split Handle.. " 7 00
Iwan's Perfection ..... " 7 75
Iwan's Hercules pattern " 9 00
Ryan's ..... " 17 00
See also Augers—Post Hole.

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel painted, per doz. $6 85
1⅛ in. " " " 7 50
1⅛ in. 3-panel natural pine, fancy ..... per doz. 11 50

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock ..... 60%&65&5%
Blacksmith's Twist 60%
Breast.
Common ..... each, $2 25
Millers Falls ..... " 2 10
Hand
Goodell's Automatic.
Nos. 01 03 3 20
Per doz.. $7.75 $12.50 $14.25 $11 00
Goodell's Single Gear per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's ..... per doz. $16 50
Bit Stock.
Standard List... 60&5%@60%@10%

DRIVERS, SCREW.

Hurwood ..... 40-10&10%
Standard ..... 65&10%
Ajax ..... 70&5%
Champion 45%
" Pattern ..... 60, 10&5%
Clark's Interchangeable 30%
Edison 60%
Reed's Lightning ..... 45&5%
Goodell's Spiral ..... 50, 10, 5&2½%
Yankee Ratchet 50%
" " Spiral ..... 50&10%
Smith & Hemenway Co ..... 40&5%

EAVE TROUGH. GALVANIZED.

Territory. L. C. L.
Eastern ..... 80&5%
Central ..... 75&10&10%
Southern ..... 75&12½%
S. Western ..... 75&5%
Terms, 2% for cash. Factory shipments generally delivered.
See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches 5 6 7
Smooth, per doz. $0.85 $0.90 $1.30
Plan'd " 2.00 2.25 2.85
Corrugated Conductor.
5-inch ..... each 60c; per doz, $7.20
6 " ..... " 70c; " 8.40
75% discount to dealers on 2-inch' 3-inch and 4-inch plain, round and round corrugated elbows.
Corrugated Stove.
Inches 5 6 7
Smooth, per doz. $0.85 $0.90 $1.50
Pol'd " 1.50 1.75 2.50
Plan d " 2.20 2.60 3.20
Four-Piece Stove.
Inches 5 6 7
Smooth. per doz. $0.50 $0.52 $0.90
Pol'd " .95 1.05 1.40
Plan'd " 1.45 1.60 2.60

EMERY CLOTH—See Cloth.

EMERY, TURKISH.

Size ..... 5-lb. pkgs. ¼ kegs, kegs
No. 60 to 150, per lb. 6½c 4½c 4¼c
Flour ..... " 5½c 3½c 3½c

ENAMEL, IRON.

English, ½-pt. cans ..... per doz. $1 50
Nubian " " ..... " 1 80
Peerless 1 50

EXTRACTORS, PIG.

See Forcips, Pig.

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick ..... 60, 10&5%
Hooks and—
Brass 55%
Iron ..... 65&5%

FASTENERS, STORM SASH

Schroeder's ..... per doz. 1 40
Sensible ..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Black Diamond ..... 70&10%
Disston's ..... 75&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior ..... per doz. $4 75
Whitson's Imp ..... " 5 25

FORKS.

These goods are sold net this year.
Barley.
Steel ..... 70&2½%
Wood, 4 tines, per doz $5.25
Coal, Coke, Cottonseed 40%
Hay.
Diamond, 2 tine ..... 50&10%
" 3 " 60%
" 4 " 40%
Golden Eagle, 3 tine 65%
" " 4 " 70%
Digging ..... 70&10%
Scoop 40%
Header.
Diamond, 3 tine ..... 66⅔&5%
" 4 " ..... 65&10%
Manure.
Diamond, 4 tine ..... 60&10%
Golden Eagle 70%
Ore 40%
Spading.
Diamond ..... 70&10%
Golden Eagle ..... 70, 10&5%

FRAMES.

Hack Saw.
Crown ..... per doz. $6 25
Miller's Falls ..... " 10 20
Star ..... " 2 85

FREEZERS, ICE CREAM.

Arctic.
Qts. 1 2 3 4 6
Each $1.10 1.30 1.50 1.80 2.30
Qts. 8 10 12 15
Each $2.95 3.80 4.50 5.20
White Mountain.
20 qt., New Platform... each $19 10
25 qt., " " " 22 60
25 qt., Sampson Power. " 43 50
40 qt., " " " 58 25

GAUGES.

Butt and Rabbet.
Stanley R. & L. Co.'s... 20&10&2½%
Cream Pail.
Fairmont ..... per doz. $3 75
Marking, Mortise, etc.
..... 50&10%@50&10&5%
Saw.
Atkin's, single, 55c; dbl. 80c per doz
Wire.
Disston's 25%

GIMLETS.

Discount ..... 35@40%

GLASS, WINDOW.

First three brackets ..... 90&20%
Above " " ..... 90&10%

GLASSES, LEVEL.

Stanley R. & L. Co. ..... 50&5%

GLUE.

Bulk.
B Amber ..... per lb. 11 c
A White ..... " 13½c
H. S. Amber ..... " 15½c
Liquid.
Eagle 40%
Le Page's—
List "A" 37½%
List "B" 33⅓%
List "C" 25%

GOODS.

Bright Wire ..... 90&20%

GREASE, AXLE.

Wood Boxes.
Diamond ..... per gro. $5 50
Frazer's 9 50
Hub Lightning 5 25
Paragon 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross $9 50
3 lb. per gross 25 00
5 lb. per gross 37 00

GRIDDLES.

Soapstone ..... 40&10%

GRINDSTONES.

Family.
Inches 7 8 9
Per doz $8.25 9.00 10.50
Loose.
Per ton ..... $20 00@$21 00
Mounted.
Ball Bearing 1 2 3
Each $3.15 3.00 2.85
Common Bearing.. 1 2 3
Each $3.00 2.80 2.65

GUN WADS.
(See Ammunition.)

HAFTS, AWL.

Brad.
Common ..... per doz. $0 19
Peg.
Common ..... " 22
Patent, plain top .... " 47
" leather top... " 52
Sewing.
Common ..... " 22
Patent ..... " 52

HALTERS.

Jute Rope ..... per doz. $0 85
Sisal Rope ..... " 1 85
Web ..... " 1 75
Leather, rope tie ..... " 6 50
" leather tie.... " 8 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Maydole's ..... 40&10%
Engineers'.
Maydole's ..... 40&10%
Farriers'.
Maydole's ..... 35&5%
Machinists'.
Maydole's ..... 40&10%
Nail.
Ajax ..... per doz. $6 00
Calumet ..... " 3 15
Cast ..... per doz. $1 10@$1 50
Maydole's ..... 30&5%
Vulcan ..... 35&5%
Riveting.
Maydole's ..... 35&5%
Shoe.
Cast ..... per doz. 75c
Tack.
All Iron ..... per doz. $0 35
Pol'd Iron, Hickory hdl. " 53
Mall. Iron, Inlaid ..... " 1 55
Magnetic 1 2 3
Per doz 70c 80c $1.00
Magazine ..... per doz. $4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs ..... 70&10%
5 lbs. and over ..... 75&5%
Masons'.
Single & Double Face ..... 70&10%

HANDLES.

Auger.
Common Assorted ... per doz. $0 38
Peck s Adjustable ... " 2 10
Roger's " ... " 4 25
Ives' " ... per set 1 35
Axe ..... 50&10%
Chisel.
Hickory, Tanged Firmer, Assorted, 25c; Large, 27c per doz.
Hickory, Socket Firmer, Assorted, 18c; Large, 22c per doz.
Applewood, Tanged Firmer, Assorted, 29c; large, 38c per doz.
Applewood Socket, Firmer, Assorted ..... per doz. 24c
Coal Pick ..... 50&10%
Drifting Pick ..... 50&10%
File, assorted 13c, large 16c per doz.
Hammer.
Adze Eye ..... per doz. 48c
Blacksmiths' ..... per doz. 55c@80c
Machinists' ..... " 45c@70c
Hatchet ..... per doz. 45c
Hay and Manure Fork ..... 40&5%
Hoe and Rake ..... 40&5%
Saw.
Plain ..... per doz. 75c
Varnished ..... " 80c
Screw Driver.
Assorted ..... " 37c
Large ..... " 48c
Shovel and Spade 40%

HANGERS.

Barn Door.
Monarch ..... 60&10%
"Never Jump" Hinge ..... 50&10%
Peerless, Loose Axle ..... 60&10%
Perfection, Roller Bearing .. 70&5%
Phoenix, Roller Bearing ..... 70&5%
Prouty, No. 315.. per doz. prs. $6 35
Rival ..... " " 3 65
Superb ..... " " 5 50
Safety Flexible . " " 6 35
Wagner's Adjustable ..... 70&10%
Warehouse 60%
Conductor Pipe.
Iwan's Perfection 50%
Eave Trough.
Baker's ..... per gro. $2 35
Imperial 20%
Wire 35%
Parlor Door.
Acme ..... per set $3 75
Ives' Improved ..... " 2 50
Lane's Standard ..... " 3 50
" New Model ..... " 3 10
Le Roy Noiseless ..... " 4 00
Richards' ..... 40-10&5%

HASPS.

Hinge, Wrought ..... 50&5%
With Staples—See Staples.

HATCHETS.

Ajax 35%
Blood's 40%
Cast Claw ..... per doz. $1 20@1 45
Cast Shingling.... " $0 95@1 20
Duffy's Barrel ..... per doz. $18 00
Germantown 40%
Hammond's 40%
Roger's Ideal ..... per doz. $5 25
Underhill's Star Lath ..... 40&10%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wenzleman's No. 1.... per doz. $ 9 75
" No. 2.... " 10 50

HINGES.

Blind.
Clark's Gravity ... per doz. sets 80c
Parker's 65%
Shepherd's Noiseless, for Wood casing ..... per doz. 1 05
Gate.
Clark's 1 2 3
Hgs & Ltch .... doz. $2.35 2.60 3.65
Hinges only .... " 1.70 1.90
Latches only... " .70 .75
Knuckle ..... per doz. prs. $6 00
Leed's ..... " sets 6 75
Superior ..... " prs. 9 50
Spring.
American 20%
Bommer Bros. Ball B'g Floor .. 35%
Bommer Bros. Spring Hinges .. 40%
Chicago ..... 25&5%
Columbia Dbl. Acting .... 40&10&5%
Gem 25%
Ideal Detachable .... per gro. $11.10
Matchless 30%
New Idea ..... per gro. $9 25
Oxford 20%
Wrought Iron.
New Lists .....
Light Strap Hinges ..... 70&5%
Heavy Strap Hinges ..... 75&10%
Light T Hinges ..... 65&5%
Heavy T Hinges ..... 70-10&5%
Extra Heavy T Hinges .... 70-10&5%
Cor. Heavy Strap 80 20-10-10-10-10&5%
Cor. Ex. Heavy T 80-20-10-10-10&5%
Screw Hook and Strap.
6 to 12 in ..... per 100 lbs. $3 65
14 to 20 in ..... " " 3 40
22 to 36 in ..... " " 3 15
Screw Hook and Eye.
½ in ..... per 100 lbs. $6 55
⅝ in ..... " " 7 60
¾ in ..... " " 9 45

HOES.

Garden ..... 70&15%
Grub.
Ajax ..... 60 & 10%
Extra 70%
Hazel ..... per doz. $5 00
Ladies' and Boys' ..... 70&15%
Mortar ..... 75&10%
Planter's Eye 62½%
Weed ..... 75&5%

HOOKS.

And Eyes.
Brass ..... 50&10&5%
Iron ..... 65&10%
Awning ..... per gro. $1 80
Belt.
Brown's ..... 70&5%
Jones' ..... 65&5%
Bench.
See Stops, Bench.

Box.
Inch..... 6 8 10 12
Per doz.....$1.35 1.65 1.75 2.30
Humason & Beckley's, per doz. 2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle
..... per doz. $7 00@$8 65
Hamilton Pattern.....per doz. 7 35
Chain.
Inch... ¼&5/16 ⅜ 7/16 ½
Per 100 $7.60-8.0 9.75 11.50 12 60
Clothes Line.
Japanned.....per doz. 22c@24c
Galvanized..... " 40c
Coat and Hat.
Cast Iron .....per gro. 72c@$1 50
Gem Wire.....75&10¢
Conductor.
Malleable.....50&10¢@50&10&5¢
Wrought .....40&10¢@50¢
Corn.
Common, unpolished, per doz. $1 40
" polished.... " 1 80
"Cut Easy"..... " 2 75
Clyde's..... " 2 20
Gate.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.75 1.80 1.90
German.....per doz. 1 90
Little Giant..... " 2 90
Wood's..... " 1 20
Hammock.
With Plate.....per doz. 33c
With Screw..... " 33c
Lambrequin, or Drapery, per gro. 21c
Picture .....50¢@50&10¢
Potato and Manure.....65&15¢
Screw.
Brass.....80&20¢
(See Goods, Bright Wire.)
Seat Spring.....per lb. 5½c

HOOPS, TUB.

Ever Ready .....per case $1.70

HOSE, GARDEN.

3 ply ¾ in. 35 lb. pressure per ft....5½c
3 " ¾ " 50 " " " 7½c
3 " ½ " 70 " " " 7½c
3 " ½ " 70 " " " 9c
4 " ½ " 80 " " " 9c
4 " ¾ " 80 " " " ...10½c
6 " ¾ " 125 " " " ...11½c
8 " ¾ " 150 " " " 13c
Cotton ¾ in. 75 lb. pressure per ft. 7c
" ¾ " 150 " " " 9c

HUSKER.

Boss.
Nos..... E A B
Per doz.....$1.85 2.05 2.05
Nos..... P PX
Per gro $5.40 5.00
Nos.....2000 3000
Per gro.....$3.00 6.75
Nos..... 4000 O OX
Per doz.....$1.15 2.25 1.65
Brinkerhoff's.
Per gro.....$14 50
Ideal.
Nos..... 102 101 100
Per doz.....$1.35 2.50 2.75
Johnson's.
Per gro.....$7 75

IRON.

See Metals—First column.

IRONS.

Curling.
Common.....per doz. 33c@48c
Princess .....per doz. $0 65
Yale..... " 84
Oxford ..... " 1 15
Ruby ..... " 1 50
Tourist, Folding..... " 90
Pinking ..... " 70
Plane.
Wood Bench.....20&5¢
Stanley R. & L. Co. (new list) 25&5¢
Sad.
Charcoal .....per doz. $11 00
Common, Polished, per 100 lb. 3 10
" Nickel plated, " 4 20
Chinese Polishing.....per doz. 7 40
Laundry. No. 1 ..... " 5 75
" No. 2 ..... " 6 25
Mrs. Pott's,
No. 50 J, Enterprise...per set 70c
No. 55 J, " ... " 70c
No. 50 T, " ... " 82c
No. 55 T. " ... " 70c
No. 50, Howells..... " 72c
No. 55, " ..... " 69c
Tailors' Sad.....per lb. 4½c
" Geese..... " 4½c
Tuyere.
Single Duck Nest.....per doz. $5 25
Double " " ..... " 6 25
Sutton .....each 2 60

JACKS.

Locomotive.....75&5¢
Wagon.
Meekers'.....per doz. $11 00
Miller's No. 2..... " 7 75
Winner ..... " 7 75
Smith & Hemenway Co .....25¢

KETTLES.

Brass.....15¢
Baldorn .....45¢
Copper.....per lb. 27c
Maslin .....66⅔¢
Sugar .....50&5¢

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade, dz. $3 85
California.....3 40
Cooper's Hoop.....15¢
Corn.
Ajax.....per doz. $2 10
Drawing.
Standard .....70¢
Adjustable.....15¢
Barton's Carpenters'.....10¢
" Folding Handle....25&5¢
Hay.
American, Sickle Edge..doz $10 50
Canton, Sickle Edge..... " 8 25
Heath's ..... " 7 75
Iwan's Sickle Edge..... " 9 50
Iwan's Impv'd Serrated.. " 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 5 75
Wadsworth's Sp'r Point " 8 75
Hedge.
Ajax, Heavy.....per doz. $6 25
" Extra Heavy.... " 8 40
Mincing.
Common, Single ..... " 40
" Double ..... " 50
Streeter, 4 Blade..... " 1 30
" 6 Blade..... " 2 0
Putty.
Common..... " 84
Goodell's.....per doz. $1 30@1 80
Russell's..... " 1 75@2 25

KNOBS.

Door.
Mineral .....per doz. $0 73
Porcelain ..... " 83
Jet..... " 83

LADDERS.

Common Long.
Per ft .....9c@14c
Extension.
Per ft 12c
Step.
Common, per ft.....6½c
" with Shelf, add 10c.
I X L, per ft 19c

LANTERNS.

Bull's Eye Police.
3-in. Flash Light.....per doz.$6 00
2¾-in. Regular..... " 4 00
3-in. Regular..... " 5 00
Tubular.
Berger.....40&10&5¢

LEADERS, CATTLE.

Nos 1 2 3
Per doz.....$0 55 $0 70 $2 75

LEATHER, LACE.

Cut.....50&10¢
Sizes.
Ex. Quality.....per sq. ft. 20c

LEATHERS, PUMP.

Valve and Plunger .....50¢

LIFTERS.

Stove Cover
Japanned .....per gro. $2 65
Coppered..... " 3 65
Devore's..... " 5 50
Zero..... " 4 00
Transom.
Payson's.....70&10¢

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos..... 15 14 13 12 11
Per doz.....10c 13c 17c 22c 29c
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....26c 31c 36c 42c
Braided in 20-ft. hanks.
Nos..... 0 1 2
Per doz 23c 26c 32c
Masons', in 100-ft. hanks..doz. $1 00
Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. " ..... " 1 10
60-ft. Sisal ..... " 1 50
72-ft. " ..... " 2 10
50-ft. Cotton ..... " 85
50 ft. Braided Cotton. " 95

LINING, STOVE.

In Bricks..... per crate 42c

MACHINES.

Boring.	Without Augers	With Augers
Ajax.....per doz.	$5 25	$6 75
Angular.... "	3 25	4 65
Boss ..... "	4 25	5 75
Upright.... "	2 90	4 35

Leather Riveting.
Chicago, Pomeroy....per doz. $9 75
Excelsior..... " 2 50
Handy ..... " 2 10
Little Giant..... " 3 10
Pony, Pomeroy..... " 8 00
Washing.
Boss 1 2 5
Per doz.....$56.20 62.20 68.20
Globe, No. 1 .....per doz. 53 00
O K Rotary..... " 55 50
Round Wayne..... " 26 50
U. S. Steel..... " 60 00
Advance, f.o.b. Chic'go " 24 50

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small ...per doz. $5 00
" " Medium. " 5 75
" " Large... " 6 75
Round Hickory..... " 1 75
" Lignumvitæ .. " 2 85
Square Hickory..... " 1 75
" Lignumvitæ.. " 3 40
Tinners'.
Applewood ..... " 1 70
Hickory..... " 80
Hickory Sheet Iron.. " 1 30

MATS.

Door.
National Rigid.....50, 10&5¢
Queen Flexible.....50¢
Stove.
Standard Quality...per gross $2 90
Best " (Pure) " 4 00
Wire Covered Asbestos, Ex. Heavy .....per doz. 1 00

MATTOCKS.

Ajax.....60&10¢
Extra .....70¢

MAULS.

Iron. lbs. 10 13 16 18 21
Per doz. $2.95 3.65 4.20 4.60 5.05
Wood face, lbs. 10 11 12
Per doz $4.55 4.90 5.15
Wood Choppers'.
Lake Super'r & Oregon Pat. 70&10¢

MEASURES.

	½ pk.	1 pk.	½ bu.
Galvanized. per dz.			$4 25
Japanned... "	$1.40	2.10	2.60

METAL.

Babbitt.
Alm .....per lb. 7½c
Best..... " 13 c
Common, No. 4..... " 6½c
Copper Mixed ..... " 19 c
Tony ..... " 9½c
See Metals—In first column.

MICA.

First Quality.....25¢
Second Quality.....35¢

MILLS, COFFEE.

Enterprise .....35¢
Parker.....50¢
Arcade .....50¢

MITRE BOXES.

See boxes.

MOPS.

Erie.....per doz. $3 15
Handled Cotton.
Pounds..... ¾ 1 1¼ 2
Per dozen...$2.00 2.35 2.65 3.25

MOWERS, LAWN.

Ball-Bearing.
Inches..... 15 17 19 21
Each $7.50 8.50 9.50 10.50
Cheap Grades.
Inches..... 12 14 16 18
Each $2.30 2.35 2.35 2.50
Clipper .....50, 10&10¢
Girard.
Inches..... 14 16
Each.....$3.25 3.50
Philadelphia.
All Styles Except A & E 60, 10&10¢
Style A.....50&10¢
Style E, High Wheel..60,10,10&10¢
Drevels.....50¢
All Day.....Net Price

NAILS.

Cut Steel.....rates, $2 05
Horse Shoe.
Ausable .....45&5¢
Capewell .....5¢
Perfect .....40&5¢
Putnam .....10-5¢
Star .....35¢
Picture.
Brass Heads .....40&10¢
Judd's.....40&10¢
Brads.....80, 10&10¢
Furniture .....65&10¢
Wire.
Small Lots.....$2 05
Carload " 2 00
Cement Coated..... 1 80

NAIL PULLERS.

See Pullers

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized Before Weaving..80&15¢
" After Weaving...80&15¢
Cut Pieces.....65&5¢

NIPPERS.

End Cutting.
Stubb's Pattern.....60&10¢
End and Diagonal Cutting.
Swedish Side.....55¢
Utica Drop Forge & Tool Co...40¢
Hoof.
Heller's .....40&5¢
V. & B.....40-5¢

NOZZLES.

Hose.
Genuine Boston.....per doz. $3 05
Genuine Gem..... " 3 15
Magic..... " 3 15

NUTS, HOT PRESSED.

Square Blank.

In.	¼	⅜	½	⅝	¾	⅞	1
lb.	9c	6c	4c	3½c	3½c	3½c	3c

Square Tapped.

In.	½	⅝	¾	⅞	1
lb.	12c	7½c	5c	4½c	4c

For 5 lb. boxes add ½c per lb. to above prices.

OILERS.

Chase Pattern
Brass and Copper.....35¢
Zinc .....60¢
Engineers'
Cannon.....50¢
Tin.....per doz. $2.00@$3.00
Machine.
Ajax.....per doz. $0 80
Copper Plated Steel.. " 1 50
Malleable Iron.....40, 10&5¢
Tin.....per doz. 55c@65c

OPENERS.

Box.
Inches..... 10 12 14
Flat ..per doz $2.85 3.60 4.15
Round " 2.10 2.25 2.75
Can.
Delmonico.....per doz. $1 30
Never Slip..... " 0 65
Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.

Combination .....per doz. $11 50
Economical..... " 4 90
Family..... " 10 50

PADLOCKS.

Standard Wrought .....70, 10&5¢
Champion .....50¢
Eureka.....40, 10&5¢
Yale .....60&5¢

PAILS.

Cream.
14-qt., without Ga....per doz. $2 65
20-qt., " " .... " 3 25
20-qt., with Gauge.... " 4 00
Sap.
10-qt., Galvanized.....per doz. 1 60
12-qt., " ..... " 1 85
Stock
Galvd. qts. 14 16 18 20
Per doz.....$3.50 3.75 4.50 5.00
Water.
Galvanized, qts 10 12 14
Per doz $1.75 1.95 2.25
Wood.
Cable, 2 Hoop.....per doz. $1 90
" 3-Hoop..... " 2 10
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop..... " 1 50
" 3-Hoop..... " 1 70

PANS.

Dripping.....60&10&5¢
Fry.
Common.....60&10&5¢
Acme.....66⅔&5¢
Roasting.
Brownie.....each 22c@30c
L. & H..... " 45c@63c

PAPER.

Building.
Plain .....per 100 lbs. $1 15
Tarred..... " 1 25
Tarred Felt..... " 1 45
Diamond A, Red Rosin, pr roll 60
Leader, Red Rosin..... " 45
Sand and Emery.
Ajax.....50&10¢
B. & A.....50&5¢
Wrapping.
Grecian Express.....per lb. 3½c
Rag..... " 2½c

PARERS.

Apple.
Bay State.....per doz. $13 00
Turntable ..... " 5 70
White Mountain .... " 4 50

Potato.
Goodsell's Saratoga 10½ in. doz. 6 50
" " 5 in.. " 5 50

PICKS.

Adze Eye Ore .....65&5%
Drifting and Poll Picks.....70%
Ajax Railroad.....60&10%
Extra Railroad .....70&5%
Surface.....65&5%

PINCHERS.

Carpenters', wrought iron, pol. steel jaws 30%
Blacksmith's 45%

PINS.

Clothes.
Common.....per gro. $0 14
Hoyt's..... " 31
U. S..... " 70

Picket.
Fluted 15 in.....per doz. $0 70
" 21 in..... " 1 60
Spiral ..... " 1 90

PIPE.

Conductor.

Territory.	Nested.	Not Nested
Eastern.....	70&15%	70&10%
Central.....	70&7½%	70&2½%
Southern	70&2½%	60&20%
Southwestern..	60&20%	60&10%

Lead.
Full coils.....per lb. 6½c
Cut " ..... " 6½c

Stove.

Acme—In.	5	6	7
Smooth, per jt..	8½c	9½c	10½c
Planished " ..	32 c	33 c	43c
Peerless—Smooth.	7½c	8 c	9½c
Polished	14½c	15½c	18c
Plan'hed	28 c	31 c	35½c

Made-up—In. 5 6 7
Smooth 7½c 8c 9½c
7 to 6 in. Smooth Tapers, pr jt..13c
6 in. Smooth T's..... " ..27c
7 to 6 in. Planished Tapers.....45c

Wrought Iron Gas Pipe
⅛@¼-in., black.....discount, 60%
⅜@½-in. ..... " 60,10&5%
¾-in. to 6-in.. black... " 70%
7 " 12 " .. " 62½%
⅛@¼ " galvanized " 42%
⅜@½ " " " 50%
¾ " 6 " " 57½%
7 " 12 " " 45%

PLANES.

Siegley Iron Bench.....50&10%

PLANTERS.

Corn.
Monitor.....per doz..$7 75
Triumph..... " .. 6 00

Potato.
Acme.....per doz..$6 25
Challenge..... " ..11 00

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Button's—In.	4½	6	8	10
Per doz.....	$2.60	$3.10	$3.90	$5.20

Button's Pattern.

In.	4½	6	8	10
Per doz.....	$2.35	$2.50	$3.45	$4.40

Cutting.
Bernard's.....30%
Lodi.....40&10&5%
4 Tube, revolving..... " 5.25

End and Diagonal Cutting.
Swedish Side 50%
Utica Drop Forge & Tool Co....40%

Fencing.
Farmers' Choice....per doz ..$8 80
Russell's..... " .. 8 80

Flat and Round Nose.
Bernard's.....30%
German 50%
Lodi.....40%
Paragon.....40&10%

Gas—In.	8	10	12
Per doz.....	$3.15	$4.10	$5.00

Tinner's.
Hollow.....
Solid.....each..5½c

PLUMBS AND LEVELS.

Common.....75%@75&10%
Cook's.....40%
Davis' Iron.....25%
Davis' Inclinometer.....15%

Stanley's.

Nos.	00S	0S	2S	3S
Per doz..	$4.65	$5.20	$7.60	$8.65
Nos.	30	25	50	35
Per doz..	$13.25	$17.75	$17.75	$12.35

POINTS.

Drive Well Points.....75&10%

POKERS—STOVE.

Wr't Steel, str't or bent, pr doz.$0.55
Wr't Steel, wood hand'l " " .80
Nickel pl'td, coil hdl's.. " " .65

POKES—ANIMAL.

Brown's, wr't steel, per doz.$5.00@6.00

POLES—FISHING.

Bamboo.

Ft.	12	18
Per. 100	$2.65	$6.25

POLISH.

Metal.
Pride of the Bar.....$1.60
Putz Cream.

Pts.	1-6	½	¾
Per doz.....	$0.80	$1.10	$1.65

Pts.	1	2	4	8
Per doz	$2 75	$4.50	$7.50	$12.50

White Silk half pints, per doz.$2.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine

Pts.	1-6	½	1	2
Per doz.....	$0.70	$1.35	$2.25	$3.00

Shoe.
M. D. C.....per doz. 36c@50c
F. C. O..... " 40c
T. M..... " 55c@$1.75
Imperial.....per gr.....$5.00

Stove.
Black Eagle, 1 lb cans. pr gr..$15.00
Black Silk—
5 lb. pail..... 80c
Paste, 5 oz. cans....per doz. $0 80
Paste, ½ lb. cans..... " 1 00
Black and Japanned—
Liquid, ½ pint cans..per doz $1 00
Liquid, 6 oz. cans... " 75
Steel Range Gloss.. " 1 75
Blackene, 1 lb cans....pr gro. 13 00
Black Jack, ¼ lb cans.. " 9 25
Dixon's Carb. of Iron.. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1 qt. per dz, 85@95c
Square, 1½ qt..... " $1 00
Square, 2 qt..... " 1 25
2 qt. Reversible..... " 1 50

POTS, FIRE.

Bernz.....each $3 85
Clayton & Lambert's, ea..$4 75@6 25
Gate City.....each 6 25
Gem..... " 6 75

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co....25%
Henis .....per doz. $2 10

PRIMERS.

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $7 50
Henry's Improved..... " 65&10%
Water's Improved..... " 70,10&5%

PULLERS.

Cork.
Daisy.....each $3 40
Phoenix..... " 1 60
Quick and Easy..... " 2 90

Nail.
Giant.....33⅓%
Giant Pattern per doz.....$6 00

Tack—Giant..... " 45

Staple.....50%

PULLEYS.

Awning—Jap'd.....40&5% to 35&5%
Clothes Line.....30&10%
Hay Fork.
Iron Wheel, 5 in.....per doz. $1 85
Wood Wheel, 6 in.... " 1 80
Wood Wheel, 6 in., pass knot..... " 2 25
Hot House—Jap'd .....30&5%
Screw..... " .....30&5%
Side ..... " .....30&5%
Sash.
Clark's..... " 42
Common Sense, 2 in ..per doz $0 26
" Pattern, 2 in.. " 22
Empire..... " 24
Ideal..... " 22

PUMPS.

Pitcher Spout.

Nos.	1	2	3	4
Each	$.90	1.00	1.10	1.40

Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
" copper ..... " 6 75
Daisy..... " 9 00
Little Giant.....each 2 25

PUNCHES.

Conductors'.
No. 22.....per doz. $2 40
Machine.....per lb. 19
Saddlers'.
Common.....per doz. 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 lbs. 2 35
Commercial..... "

RAIL.

Barn Door.
Light Wrought.....per ft. 2½c
Safety..... " 4½c
Single Flange ..... " 1½c
Smith's Wro't Bracket, plain 3½c
Smith's Special 4½c
Smith's "Never Jump".....11c 50%
Smith's Plain Steel 30%
Smith's Milled Steel 4½c
Sliding Door.
Painted iron.....per ft. 4½c
Bronzed wrought iron... " 8½c

RAKES.

Coal or Wood.....per doz. $5.60
Garden.
Steel, braced.....80&10%
Steel, bow.....70c
Malleable Iron, heavy.....70&10&5
Hay.
Wood.....$1.40@$2 00
Lawn—Wood.
Common.....per doz. 2 35
Automatic ..... " 5 75
Gibbs'..... " 3 70
Jumbo, 36 teeth..... " 6 30

RASPS—See Files.

RAZORS.

Bo-ras-ic 50%
Red Devil.....50%

REGISTERS.

List December 5, 1904.

Black and White Japanned...70&10%
Nickel Plated.....70&10%
Electroplated, Brass, Bronze or Copper.....70&10%

RINGS

Bull.

Copper.....	2-in.	2½ in	3 in.
Per doz.....		$1.20	$1.60
Rea's Impro'd Self Piercing copper, pr d'z.	$1.25	1.65	1.75
Steel per doz..		.95	1.05
Nickel Plated		1.35	...

and Ringers—Hog.
Blair's Rings .....per doz. $0 60
Blair's Ringers..... " 85
Brown's Rings..... " 65
Brown's Ringers..... " 90
Champion Ringers... " 1 70
Hill's Ringers..... " 65
Hill's Ring, boxes..... " 45
Major Rings ..... " 80
Perfect Ringers..... " 95
Wolverine Rings..... " 1 50
Wolverine Ringers... " 70
Fruit Jar.
White.....per lb 30c
Key.
Split, round.....per doz. 17c
Split, square..... " 32c
Ball, Round..... " 32c

RIVETS.

and Burrs.
Copper Belt .....50&5%
Coppered Iron 75%
Tinners' .....66⅔@10%
Hame .....per lb. $0 00
Slotted Clinch.....per doz. 40c@45c
Tubular.
Nos. 1 and 2 assorted sizes, doz. 45c

RIVET SETS.

See Sets.

ROPE.

Cotton.
¼, 5-16-in. Com. on reels..per lb. 12½c
¼, 5-16-in. Com. in coils .. " 13c
¼, 5 16 Imperial in coils . " 22c
Sewall & Day Sisal Rope.
Rates.....10½c
Sisal.
Eagle, rates.....per lb. 8½c
Pure Manila.
Rates..... " 12½c

RULES.

Boxwood.....60%
Ivory .....35&5%

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's .....25&7½%
Jackson's.....25&7½%
Butchers'.
Disston's..... 35&7½%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz. $1.35@$1.60
Disston's.....25&7½%
Cross-Cut.
Atkins'.....35%
Disston's..... 40&10% &50%
Pocahontas Bit.....per ft. 30c
Pocahontas, Blued..... " 41c
Dehorning.
Atkins'.....per doz. $5 50
Disston's..... " 5 75
Hack.
Disston's.....25½%
Keystone.....30%
Hand and Rip.
Brown's .....30&7½%
Disston's No. 7.....30&7½%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120.....25&7½%
Gorham's Comb. .....30&7½%
Keystone.....30&7½%
Sam Sickles', hand....per doz.$4 25
"I Will," hand..... " 5 75
"I Will," rip..... " 6 75
Keyhole—Disston's.....25&7½%
Kitchen.
Sterling.....35%
One Man 50%
Panel.
Brown's.....30&7½%
Disston's No. 7.....30&7½%
Disston's No. D100.....25&2½%
"I Will".....40%
Pruning.
Avery's Duplex.....25&7½%
Brown's.....25&7½%
Disston's.....25&7½%
Wood.
Common.....per doz. $4 50
Handy..... " 7 60
Happy Medium..... " 7 00
Wood Sawyers' Delight " 8 25

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 20
" painted.... " 1 60

SCALES.

Counter.
Pelouze..... .....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½ Bu. "Hercules,"..per doz. $13 75
1 " " " 15 50

SCRAPERS.

Box.
Stanley's Adjustable, per doz.$3 75
Triangular..... " 2 50
Cabinet.
Ajax.....per doz. $2 15
Cast Steel..... " 65c@75c
Stanley's No. 80..... " $11 50
Road.

Cubic ft.	7	5	3
Without runners, ea.	$4.15	3.90	3.65
With runners.... "	4.40	4.15	3.90

SCREWS.

Bench.
Iron .....50&5%
Wood, white maple..per doz. $3 60
Hand—Wood.....20%
Hand Rail.....70&10%
Jack .....75&10&10%
Lag or Coach—all sizes, gimlet pointed .....75&10%
Saw—Centennial.

Nos.	1	2	3	4	5	6
Per doz.	19c	22c	27c	32c	25c	27c

Wood.
F. H. Bright Steel.....87½, 10&10%
R. H. Blued Steel.....85&5%
F. H. Jap'd Steel.....82½&5%
F. H. Brass.....85&5%
R. H. Brass.....80&5%
R. H. Nickel Plated.....75%

SCYTHES.

Clipper, grain.....per doz. $8 12
Clipper, grass..... " 6 36

SHAVING SETS.

Smith & Hemenway.....60%

SETS.

Nail.
Round, common.....per doz. $0 33
Square, " ..... " 42
Octagon " ..... " 33
Square, Buck Bros.. " 1 30
Cup Point, knurled, pr. doz. 70c@$1.20

Rivet.
Farmers'.....per doz. $1 45
Tinners'.....50&10%

Saw.
Aiken's Pattern.....per doz. $3 50
Common Lever..... " 1 20
Disston's Monarch... " 6 50
" X Cut..... " 12 00
German ..... " 1 05
Morrill's Old Style... " 5 00
" Pattern.... " 4 25
Leach's..... " 4 80
Nashe's Hand..... " 3 15
" X Cut..... " 4 20
Stillman's Lever..... " 1 30
" X Cut..... " 2 50

SHARPENERS, SKATE.

Diamond.....per doz. $1 60
Smith & Hemenway.....20%

SHAVES, SPOKE.

Iron.....per doz. $1.35@$2.75
Wood..... " 2.75@ 4.75
Bailey's.....50&5%
Goodell's.....15%
Stanley's Universal.....30&5%

SHEARS.

Pruning.
Buckeye, No. 1.....per doz. $6 75
" No. 2..... " 8 40
California Pat.. 9 in.. " 4 20
" " 10 in.. " 5 00
Draw Cut, No. 3..... " 14 75
" " No. 4..... " 17 50
Henry's Pat. 0 01 14 012
Per doz.....$1.90 $2.50 $3.15 $3.30
Star.....per doz. $4.75

Sheep—No. BBA.
Inches..... 6 6½ 7
Reg. Grip..... $11.25 $11.50 $12.00
Nar. Grip, doz. 11.00 11.25 12.25

Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common.
Inches..... 3 4 5
Per set..... $0.34 $0.42 $0.70

Hatfield's.
Per set..... .75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.

Union..... per doz. $6.75

SHIELDS.

Expansion Bolt Shields.....50&10%

SHOES.

Conductor.
5-inch.....each 28c: per doz. $ 3.30
6 " ..... " 33c; " 3.90
60% discount to dealers on 2-inch, 3-inch and 4-inch plain, round and round corrugated shoes.

SHOE POLISH—See Polish.

SHOT—See Ammunition.

SHOVELS AND SPADES.

Coal.
No. 2 Ajax.....per doz. $5 25
No. 4 Golds..... " 6 25
Ames' new list.....Discount 12½%

	Per Doz.
Neverbreak, hollow bck, blk	$15 75
National.... " " "	14 75
Buckeye .... " " "	10 00
Mohawk.... " " "	9 00

Drain.
Iwan's Perfection.....50%

Railroad, Etc.
Gold Hibbard's.....per doz. $9 25
C. H. Conover's..... " 7 75
Beckwith's..... " 7 75
Hickory..... " 6 25
Greenlee's..... " 5 75
Columbus..... " 5 00
Ames' new list.....Discount 12½%

Snow.
Per doz.....$1.65@$9.00

A aska Steel.
D Handle.....per doz. $6 00
Long Handle..... " 5 00

SINKS.

Cast Iron.
Painted..... 50%
Enameled, White.....60-10&5%

Wrought Steel.
Painted, new list.....40 10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.

Champion.....65%
German Pattern.....30&5%
Judd's Pattern.....60&10%@70%

SNATHS.

Double Ring, Bush.....per doz. $6 75
Patent Loop " ..... " 7 30
" " Grass..... " 5 75

SNIPS, TINNERS'.

Hernisch's.....40&5%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.

Nos.....	1	2	3	4
Per doz....	28c	33c	35c	40c

Reliance.
Per doz.....light $1.45; heavy $2.30

Star.
Per doz..... light 90c; heavy $1.35
Torrey's.....per doz. $1.25
Warner's No..... 11 13
Per doz..... 75c $1.35

SQUARES.

Steel and Iron.....75%
(Add for Bluing, $2.50 per doz., net)

Mitre.
Stanley's No. 12.....40%

Try.
Stanley's No. 20, new list...30&10%
" No. 12 and 14.....40%

Try and Bevel.
Stanley's .....40&5%

Try and Miter.
Fox's.....per doz. $6.75
Winterbottom's.....50%

SQUEEZERS, LEMON.

Common Wood.....per doz. $0 70
Porcelain Lined, Wood. " 1 25
Boss, malleable iron.... " 75
Pearl, nickel plated..... " 1 30
Star, " " ..... " 1 60
Little Giant, tin'd iron. " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated .... " 4 50

STAPLES.

Blind.
Barbed.....per ℔ 9¼@9½c

Butter Tub..... " 8@8½

Fence—less than carload.
Polished.....per 100 ℔ $2 20
Galvanized..... " 2 50

Netting.
Galvanized.....per 100 ℔ 3 70

Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....85-10&5%
Extra heavy.....85&5%

STEELYARD.

Discount 25%

STONES.

Axe.
Hindostan.....per ℔ 5½@7c
More Grit..... " 9½c
Washita ..... " 17 c

Emery.....60%@60&5%

Oil—Mounted.
Arkansas Hard.....per doz. $23 00
Arkansas Soft..... " 15 50
Hindostan .....per ℔ 6¼@6½

Oil—Unmounted.
Arkansas Hard.....per ℔ $2 05
Arkansas Soft..... " 1 10
Lily White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita ..... " 26

Sythe.
Black Diamond.....per gro. $7 75
Clear Grit..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 20
La Moille ..... " 7 00
White Mountain..... " 6 50
Willoughby Lake..... " 6 25
Red End..... " 3 15

STOPS, BENCH.

Hotchkiss'.....per doz. $3 50

STOPPERS, FLUE.

Common.....per doz. $0 32
Crown ..... " 45
Gem, flat, painted..... " 72
Gem, cor'd, decorated.. " 65
Kirch's..... " 90
Peerless.... ..... " 63
Skinner s Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards.

STOVE POLISH—See Polish.

STRAPS.

Scoop.....per doz. prs. $1 85
Skate..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's.....per doz. $3 90
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50

Wire.
N. S. Elwood's..... " 6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Star Lever..... " 6 25
Star Tackle Block.... " 9 25
Warner's..... " 6 25

SWIVELS.

Malleable Iron.....per ℔ 6¼c
Wrought Steel.....per gro. $4 50

TACKS.

American Cut.....90&5%
American Wire.....85&25&10%
Bill Posters Cut.....90&40%
Blued Carpet.....90&15%
Tinned Carpet.....90&10%
Gimp.....90&35%
Upholsters' Cut.....90&40&5%
Upholsters' Wire.....90&35%
Double Pointed.....90&20%
Copper.....per ℔ 32c
Canvas Nails.....75&5%
Clout Nails .....75&5%
Hungarian Nails.....80&5%

TAPES, MEASURING.

Asses' Skin.....35%
Bend Leather.....15%
Patent Leather.....15%
Lufkin's Steel.....25%
Lufkin's Metallic.....25%

TEE BEVELS—See Bevels.

THERMOMETERS.

Tin Case.....per doz. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 00

TIES.

Bale.
Single Loop.....80&10%
All other kinds.....70%

Cow—See "Chains."

TOOLS, SAW.

Atkins' Dexter.....per doz. $4 50
Atkins' Excelsior..... " 6 50
Disston's Universal.....40%

Minature.
Smith & Hemenway.....25%

TRAPS.

Fly.
Balloon.....per doz. $1 10
Harper's..... " 1 30

Game.
Newhouse.....50%
New Victor.....75&5%

Mole.
Reddick's.....per doz. $5 60

Mouse and Rat.
Wood Choker.....per hole $0 11
Tin Choker..... " 09
Delusion.....per doz. 85
Imitation Sight, Rat. " 80
Marty Rat..... " 6 75
Marty Rat Imitation.. " 3 75
Marty Mouse..... " 3 15
Marty Mouse Imitation " 2 10
French Automatic.....each 3 60

TROWELS.

Brick.
Standard.....30%
Brade's.....10&5%
Disston's.....30%
Rose's.....20%

Plasterers.
Standard.....33⅓%
Disston's.....30%
W. & McP.....25%

TRUCKS.

Bags.....each $1 70
Handy..... " 1 50
Warehouse .....60&5%

No.....	1	2	3
Half Ironed....	$2.65	$3.40	$5.00
Full Ironed....	3.90	5.75	6.75

TUBS, WASH.

Standard.

Nos.....	3	2	1	Ex. large
Per doz....	$4.75	$5.65	$6.50	$ 8.75

Dowell.

Per doz....	5.60	6.65	7.50	10.00

Cedar.

Per doz....	6.50	7.50	8.25	11 50

Indurated.

Per doz....	7.20	7.95	9.45	11.70

Galvanized.

No.....	1	2	3
Per doz.....	$5.25	$5.75	$6.50

TWINE.

	Per ℔
3-ply Cotton Wrapping	19c
4 " " "	19c
4 " " Extra Wrappings	24c
4 " " " Hvy. Wrappings	22c
4 " " Wrapping on tubes	24c
3 " " " " cones	21c
4 " " " " "	21c
India Hemp, ¼-lb. balls	18c
" " ½-lb. "	17c
" " ¼-lb. " .....doz.	65c
2-ply " ¼-lb. "	12c
3-ply " ¼-lb. "	11c
Jute Wrappings, ¼-lb. balls	12c
Jute Wool, 1-℔ balls	6c

Seine.

Nos.....	6	9	12	15+
Soft, per ℔	.24	21½	20½	20
Med. "		21½	20½	20
Hard "		23½	22½	22

Staging, ¼-lb. ball, size				
21				20½c
" " " " 24				20c
" " " " 27				20c
Bagging " "				22c
3-ply "B" in hanks				19c
4 " "B" "				19c
3 " "A" "				29c
3 " Silver Finish, in hanks				39c

Fodder or Lath
130-strand 7½c
200-strand.....8½c

VISES.

Bonney's.....25%
Cherry's 20%
Parker s Oval Slide.....
.....5½, 10, 2½% @ 50 10, 5, 2½%
Parker's Parallel.....15&20%
Parker's Victor.....10%
Parker's Combination.....65%
Solid Box.....60&5%
Adam's Mechanics'.....each 2 65
Williamson Universal 40%

WARE.

Cast-Iron Hollow.
Ground.....50&10%
Unground .....60&5%
Extra Finished.....40&10
White Enameled.....40, 10&5%

Enameled.
Cherry Blossom and Chrysolite..50%

WASH BOARDS—See Boards.

WASHERS.

Standard O. G. cast iron...per ℔. 2½c
Wrought iron in bulk per ℔.:

In.	½	⅝	¾	⅞	1
	7½c	5½c	4c	3½c	3½c	3½c	3½c

Wrought steel in 5 ℔. boxes, per ℔.

In.	½	⅝	¾	⅞	1
	8½c	6½c	5c	4½c	4½c	4½c	4½c

WASHING MACHINES—See Machines.

WEDGES.

Ax.....per doz....30c
Galling .....per ℔ 10½c
Saw ..... " 8½c

WEANERS.

Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz ..... 2 50 to 3 25
Standard, per doz..... 2 75
Hoosier, per doz..... 3 10 and 4 15

WEIGHTS.

Hitching ....per ℔ 2½c
Sash—F.O.B. Chicago...pr ton $21 00

WHEEL BARROWS.

Common Railroad....per doz..$15 50
Heavy " .... " .. 19 50
Railroad, ball bearing " .. 19 00
Favorite Steel Tray.. " .. 25 00
No. 04 Steel Dirt.... " .. 47 00
No. 04½ " " .... " .. 50 00

WHEELS.

Corundum .....70&10&5%
Emery .....75&5%

Well	In.	8	10	12	14
Per doz.....		$1.90	$2.20	$3.00	$5.50

WIRE.

Barbed	Painted.	Galv'd.
Carloads..per 100 lbs..	$2.15	$2.45
Less than car " ..	2.30	2.50

Brass.
In coils.....30%
In 1 ℔ spools, new list.....50&10%

Broom—Tinned.....60&10&10&10%

Cable—Same price as Barbed Wire.

Copper.
In coils.....20&10%33⅓%
In 1 ℔ spools, new list .... 50&10%

Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $1.95
Nos. 6 to 9, Galvl'd... " 2.25

Hair—New list.....50&10%

Market.
Bright, full bdles.....70&10%
Bright, broken bdles.....70%
Coppered, full bdles 70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....70&5%
Tinned, broken bdles.....65&10%

Picture—In coils.....80%@80&10%
In 5 ℔. spools .....per ℔..26c

Plain—Small lots..... $2.00
Car lots 1.95
Small spools 5c per hundred higher.

WRENCHES.

Acme Standard.....60%
Alligator .....70&10%
Always Ready..... 50%
Bemis & Call No. 2 Improved Pipe Wrenches ..... .60%
Coe's Standard.....40&10%
Girard's Agricultural.....75&50%
Wescott's "S".....33⅓%
Malleable "S".....per ℔. 05½c
Malleable..... " 05½c
Stillson Pipe.....60&5%
Trimo " 60%

WRINGERS.

Clothes.
No. 22, Guarantee....per doz.$31 50
No. 110, Guarantee.... " 31 50
No. 110, Brighton..... " 21 00
No. 22, Pioneer..... " 20 00
No. 2, Superb..... " 19 50
No. 730, Easy..... " 26 00
No. 500, Royal ..... " 30 00
No. 350, Universal.... " 25 50
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Augers—Post Hole

Iwan Bros., Streator, Ill

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Columbus Bolt Wks., Columbus, O

Brass

Chicago Brass Co., Chicago
Merchant & Evans Co., Philadelphia, Pa
Plume & Atwood Mfg. Co., Chicago, Ill

Burrs

Plume & Atwood Mfg. Co., Chicago, Ill

Cans

Stuber & Kuck, Peoria Ill

Carpenters' Tools

Hurwood Mfg. Co., Bridgeport, Ct
Ohio Tool Co., Columbus, O
Stanley Rule & Level Co., N. Britain, Ct

Cartridges

Peters Cartridge Co., Cincinnati, O

Castings

Taylor & Boggis Fdy. Co., Cleveland, O

Ceiling Machinery

Canton Fdy. & Mch. Co., Canton, O

Ceilings—Metal

Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Steel Roofing Co., Canton, O
Friedley & Voshardt, Chicago, Ill
Illinois Roofing & Supply Co., Chicago, Ill
Kanneberg Roofing & Ceiling Co., Canton, O
Keighley Met. Ceiling Co. Pittsburg, Pa
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn
Wheeling Corrugat'g Co., Wheeling, W. Va

Cement Tools

Kramer Bros. Fdy. Co., Dayton, O

Chains

Bridgeport Chain Co., Bridgeport, Ct
Oneida Community, Oneida, N.Y

Chimney Tops

Iwan Bros., Streator, Ill
Kramer Bros. Fdy. Co., Dayton, O
Sterling Fdy. Co., Sterling, Ill

Clippers

Hotchkiss, Edward S., Bridgeport, Ct

Clothes Dryers

Canton Clothes Dryer & Mfg. Co., Canton, O
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Coal Hods

Victor Stamping Co., Cleveland, O

Coffee Mills

Arcade Mfg. Co., Freeport, Ill

Conductor Hangers

Berger Bros. Co., Philadelphia, Pa

Conductor Pipe

Berger Bros. Co., Philadelphia, Pa
Berger Mfg. Co., Canton, O
Bostwick Steel Lath Co., Niles, O
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Friedley & Voshardt, Chicago, Ill
Garry Iron & Steel Co., Cleveland, O
La Crosse Steel Roof. Co., La Crosse, Wis
Reeves Mfg. Co., Canal Dover, O

Copper

Chicago Brass Co., Chicago
Merchant & Evans Co., Philadelphia, Pa
Plume & Atwood Mfg. Co., Chicago, Ill

Corn Cribs

Denning Wire & Fence Co., Cedar Rapids, Ia

Cornices

Badger Steel Roofing Co., La Crosse, Wis
Berger Mfg. Co., Canton, O
Dreis & Krump, Chicago, Ill
Eller, J. H. & Co., Canton, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Cornice Brakes

Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Wks., Buffalo, N.Y
Walker Tool Co., Lansing, Mich

Corrugated Iron

Bostwick Steel Lath Co., Niles, O
Garry Iron & Steel Co., Cleveland, O

Cut Offs—Rain Water

Cooney & Geiger, Indianapolis, Ind
La Crosse Steel Roof. Co., La Crosse, Wis

Cutlery

Ohio Tool Co., Columbus, O
Smith & Hemenway, Corp., Ltd. New York

Dampers

Arcade Mfg. Co., Freeport, Ill
Dust, Wm. T. & Co., Detroit, Mich
Sayre Stamping Co., Sayre, O

Dies

Globe Mch. & Stamp Co., Cleveland, O

Door Hangers

Stowell Mfg. & Fdy. Co., South Milwaukee, Wis

Drain Cleaners

Iwan Bros., Streator, Ill

Drills

North Bros. Mfg Co., Philadelphia, Pa

Drop Presses

Canton Fdy. & Mch. Co., Canton, O

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Badger Steel Roofing Co., La Crosse, Wis
Bostwick Steel Lath Co., Niles, O
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La Crosse Steel Roof. Co., La Crosse, Wis
Reeves Mfg. Co., Canal Dover, O
Whitacre Mfg. Co., J. E., Rockford, Ill

Egg Beaters

Taplin Mfg. Co., New Britain, Ct

Elbows—Conductor Pipe

Dieckmann, F., Cincinnati, O
Wheeling Corrugated Co., Wheeling, W. Va.

Electrotypes

St. Louis Electrotype Fdy., St. Louis, Mo

Elevators

Kimball Bros. Co., Council Bluffs, Ia

Enamel Ware

Lalance & Grosjean Mfg. Co., Chicago

Enameling

Pell, John, Enameling Wks., Columbus, O

Faucets

Litchfield, J. M., New York, N.Y

Fencing

Denning Wire & Fence Co., Cedar Rapids, Ia

Files

Barnett, G. & H. Co., Philadelphia, Pa
Disston Henry & Sons, Philadelphia, Pa

Flue Stoppers

Stuber & Kuck, Peoria, Ill

Forming Rolls

Bertsch & Co., Cambridge City, Ind
Bishop Hdw. Co., Dowagiac, Mich.
Globe Mch. & Stamp. Co., Cleveland, O
Niagara Mch. & Tool Wks., Buffalo, N.Y
Walker Tool Co., Lansing, Mich

Foundry Supplies

Obermayer, S. Co., Cincinnati, O

Fuel—Incandescent

Williams Stove Lining Co., Taunton, Mass

Furnaces—Hot Air

Beckwith, Estate, P. D. Dowagiac, Mich
Bergstrom Stove Co., Neenah, Wis
Boynton Furnace Co., New York, N. Y
Canton Fdy. & Mch. Co., Canton, O
Craig-Reynolds Fdy. Co., Dayton, O
Detroit Heating & Lighting Co., Detroit, Mich
Deuscher, H. P. Co., Hamilton, O
Green Fdy. & Furn. Wks., Des Moines, Ia
Henry & Scheible Co., Cleveland, O
Keith Furn. Co., Des Moines, Ia
Kelsey Heating Co., Syracuse, N. Y
Kontny, John, Chicago, Ill
Kruse & Dewenter, Indianapolis, Ind
Lennox Furnace Co., Marshalltown, Ia
March-Brownback Stove Co., Pottstown, Pa
Meyer Furn. Co., Peoria, Ill
Monroe Fdy. & Furn. Co., Monroe, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis
Pittsburgh Stove & Range Co., Pittsburgh, Pa
Robinson Furn. Co., Chicago, Ill
Schwab & Sons Co., Milwaukee, Wis
Smith, Chas. Co., Chicago, Ill
Wellsburg Heating & Fdy. Co., Wellsburg, W. Va
Wise Furn. Co., Akron, O
Youngstown Furn. & Supply Co., Youngstown, O

Furnace Pipe and Fittings

Green Fdy. & Furn. Wks., Des Moines, Ill
Meyer, F. & Bro. Co., Peoria, Ill
Mueller, L. J. Furn. Co., Milwaukee, Wis

Furnace Repairs

Dust, Wm. T. Co., Detroit, Mich
Morris Stove Repair Co., Chicago, Ill

Furnace Supplies
Malworth Run Fdy. Co., Cleveland,

General Merchandise
Lyon Bros., Chicago. Ill

Hammers
Franklin Specialty Co., Reading, Pa

Hangers—Trouser
Pullman Mfg. Co., Rochester, N. Y

Hardware Jobbers
Clark, Quien & Morse, Peoria, Ill
Lee-Glass-Andreesen Hdw. Co., Omaha

Hatchets
Franklin Specialty Co., Reading, Pa

Hay Carriers
Stowell Mfg. & Fdy. Co., Milwaukee

Heaters—Steam and Hot Water
American Radiator Co., Chicago, Ill
Boynton Furn. Co., New York
Craig-Reynolds Fdy. Co., Dayton, O
Detroit Heating & Lighting Co., Detroit, Mich
Haynes-Langenberg Mfg. Co., St. Louis
Monroe Fdy. & Furn. Co., Monroe, Mich
Morgan & Co., Chicago, Ill
Mueller, L. J. Furn. Co., Milwaukee, Wis

Hinges—Spring
Bommer Bros., Brooklyn, N.Y

Hollow Ware
Avery Stamping Co., Cleveland, O
Sperry, D. R. & Co., Batavia, Ill

Hot Water Attachments
Smith Co., Chas., Chicago, Ill

Ice Cream Freezers
North Bros. Mfg. Co., Philadelphia, Pa

Ice Picks
Arcade Mfg. Co., Freeport, Ill
Franklin Specialty Co., Reading, Pa
Hurwood Mfg. Co., Bridgeport, Ct

Kitchen Utensils
Arcade Mfg. Co., Freeport, Ill
Fanner Mfg. Co., Cleveland, O
Taplin Mfg. Co., New Britain, Ct

Lanterns
Berger Mfg. Co., Canton, O
Hurwood Mfg. Co., Bridgeport, Ct

Levels
Baker-McMillen Co., Akron, O
Chapin-Stephens Co., Pine Meadow, Ct
Ohio Tool Co., New York, N.Y
Stanley Rule & Level Co., New Britain, Ct

Lightning Rods
Security Lightning Rod Co., Burlington, Wis

Lighting Systems
Detroit Heating & Lighting Co., Detroit, Mich

Locks
Taylor & Boggis Fdy. Co., Cleveland, O

Mail Boxes
Blick-Williams Co., Indianapolis, Ind
Folsom, C. G., South Bend, Ind
Peck, C. A., Hdw. & Mfg. Co. Berlin, Wis
Signal Mail Box Co., Joliet, Ill

Meat Choppers
Smith & Hemenway, Corp., Ltd. New York

Metal Lath
Wheeling Corrugated Co., Wheeling, W. Va
Bostwick Steel Lath Co., Niles, O

Metal—Perforated
Harrington & King Perforating Co., Chicago, Ill

Metal Polish
Hoffman, Geo. W., Indianapolis, Ind
Nickel Plate Stove Polish Co., Chicago

Metal Shingles
Burton, W. J. Co., Detroit, Mich
Cortright Metal Roofing Co., Philadelphia
Nat'l Sheet Metal Roof. Co., Jersey City

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Brauer, A. G., St. Louis, Mo
Dust, Wm. T Co., Detroit, Mich
Morris Stove Repair Co., Chicago, Ill
Munsell, Eugene & Co., New York, N.Y

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Whitacre Mfg. Co., J. E., Rockford, Ill

Molding Sand.
Newport Sand Bank Co., Newport, Ky

Nail Pullers
Smith & Hemenway, Corp., Ltd. New York

Nuts
American Lock Nut Co., Oregon, Ill
Atlas Bolt & Screw Co., Cleveland, O
Columbus Bolt Works, Columbus O
Garland Nut & Rivet Co., Pittsburgh, Pa.

Oil Cans
Cooney & Geiger, Indianapolis, Ind

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Connors, Wm. Paint Mfg. Co., Troy, N.Y
Dixon, Jos. Crucible Co., Jersey City, N.J

Pattern Letters
St. Louis Electrotype Fdy., St. Louis

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Dixon, Jos. Crucible Co., Jersey City, N.J

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Harrington & King Perforating Co., Chicago, Ill

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Niagara Mch. & Tool Wks., Buffalo, N.Y
Walker Tool Co., Lansing, Mich
Weiss, H. & Co., New York, N.Y

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Registers
Ferrosteel Co., Cleveland, O
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Mueller, L. J., Furn. Co., Milwaukee, Wis
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Schwab & Sons Co., Milwaukee, Wis
Stowell Mfg. & Fdy. Co., Milwaukee, Wis
Waterloo Register Co., Waterloo, Ia

Roofing—Asphalt
Asphalt Ready Roofing Co., New York
Stowell Mfg. Co., Jersey City, N.J

Roofing—Iron and Steel
Berger Mfg. Co., Canton, O
Bostwick Steel Lath Co., Niles, O
Burton, W. J. Co., Detroit, Mich
Canton Steel Roofing Co., Canton, O
Cortright Metal Roof. Co., Philadelphia
Follansbee Bros. Co., Pittsburgh, Pa
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Garry Iron & Steel Co., Cleveland, O
Kanneberg Roofing & Ceiling Co., Canton, O
La Crosse Steel Roof. Co., La Crosse, Wis
Nat'l Sheet Metal Roof. Co., Jersey City
Reeves Mfg. Co., Canal Dover, O
Wheeling Corrugat'g Co., Wheeling, W.Va

Roofing Cement
Connors, Wm. Paint Mfg. Co., Troy, N.Y
Garry Iron & Steel Co., Cleveland, O

Roof Paint
Conners, Wm. Paint Mfg. Co. Troy, N.Y
Dixon, Jos. Crucible Co., Jersey City, N.J
Garry Iron & Steel Co., Cleveland, O
Stowell Mfg. Co., Jersey City, N.J

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Chapin-Stephens Co., Pine Meadow, Ct
Lufkin Rule Co., Saginaw, Mich
Stanley Rule & Level Co., New Britain, Ct

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Schreiber & Conchar Mfg. Co., Dubuque, Ia

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Pullman Mfg. Co., Rochester, N.Y

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Harrington & King Perforating Co., Chicago, Ill

Screens—Radiator
Harrington & King Perforating Co. Chicago, Ill

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Columbus Bolt Works, Columbus, O

Screws—Hand
Chapin-Stephens Co., Pine Meadow, Ct
Grand Rapids Hand Screw Co., Grand Rapids, Mich
Ohio Tool Co., Columbus, O

Screw Drivers
Hurwood Mfg. Co., Bridgeport, Ct
North Bros. Mfg. Co., Philadelphia, Pa
Smith & Hemenway, Corp., Ltd. New York

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Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y
Weiss, H. & Co., New York, N.Y

Sheet Metal Specialties
Friedley & Voshardt, Chicago, Ill
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Kinne Mfg. Co., Minneapolis
Kinsey Mfg. Co., Dayton, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

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Wheeling Corrugat'g Co., Wheeling, W.Va

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Ward-Dickey Steel Co., Indiana Harbor, Ind

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Atlas Mfg. Co., New Haven, Ct

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Avery Stamping Co., Cleveland, O

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Stuber & Kuck, Peoria, Ill

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Badger Steel Roofing Co., La Crosse, Wis

Skylight Gearing
Weiss, H. & Co., New York, N.Y

Slate
Auld & Conger Co., Cleveland, O
Johnson, E. J. & Co., New York, N.Y
O'Hallorcan & Jacobs, Pittsburgh, Pa

Soldering Furnaces
Burgess Soldering Furn. Co., Columbus, O
Clayton & Lambert Mfg. Co., Detroit
Diener, Geo. W. Mfg. Co., Chicago

Soldering Irons
Emmelmann Bros. Mfg. Co., Indianapolis

Sporting Goods
Enterprise Mfg. Co., Akron, O

Squares, Machinists'
Disston, Henry & Sons, Philadelphia, Pa
Duby & Shinn, New York City, N.Y
Stanley Rule & Level Co., New Britain, Ct

Stampings—Sheet Metal
Globe Machine & Stamping Co., Cleveland, O

Staples
Titchener & Co., Binghamton, N.Y

Steel Lath
Bostwick Steel Lath Co., Niles, O

Stoves and Steel Ranges
Beckwith, P. D. Estate, Dowagiac, Mich
Belleville Stove Wks., Belleville, Ill
Bergstrom Stove Co., Neenah, Wis
Born Steel Range Co., Cleveland, O
Cahoone Co., New York, N.Y
Champion Steel Range Co., Cleveland, O
Chicago Stove Works, Chicago, Ill
Foster Stove Co., Ironton, O
Galusha Stove Co., Rochester, N.Y
Gem City Stove Co., Dayton, O
Globe Stove & Range Co., Kokomo, Ind
Home Pride Range Co., Marion, Ind
Joliet Stove Works, Joliet, Ill
Landay Steel Range Co., St. Louis
March-Brownback Stove Co., Pottstown, Pa
Pittsburgh Stove & Range Co. Pittsburgh, Pa
Resor & Co., Wm., Cincinnati, O
Toledo Stove & Range Co., Toledo, O
Van. John Range Co., Cincinnati, O
Willard, Wm. G., St. Louis, Mo

Stoves—Gas
Fanner Mfg. Co., Cleveland, O
Pittsburgh Stove & Range Co., Pittsburgh, Pa

Stoves—Oil
Standard Lighting Co., Cleveland, O
Taylor & Boggis Fdy. Co., Cleveland, O

Stove Carriers
Kramer Bros. Fdy. Co., Dayton, O

Stove Casters
Kramer Bros. Fdy. Co., Dayton, O

Stove Cement
Dixon, Jos. Crucible Co., Jersey City, N.J

Stove Clay
Bridgeport Crucible Co., Bridgeport, Ct

Stove Lifters
Kramer Bros. Fdy. Co., Dayton, O

Stove Lining
Williams Stove Lining Co., Tauton, Mass

Stove Mats
Stuber & Kuck, Peoria, Ill

Stove Patterns
Cope Pattern Wks., Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N.Y
Weller Pattern Co., Quincy, Ill

Stove Pipe
Budke Mfg. Co., Parkersburgh, W. Va
Kinne Mfg. Co., Minneapolis
Ohio Stove Pipe & Mfg. Co., New Philadelphia, Ohio
Reeves Mfg. Co., Canal Dover, O
Wheeling Corrugat'g Co., Wheeling, W.Va

Stove Pipe Radiators
Rochester Radiator Co., Rochester, N.Y

Stove Pipe Thimbles
Stuber & Kuck, Peoria, Ill

Stove Polish
Black Silk Stove Polish Wks., Sterling, Ill
Nickel Plate Stove Polish Co., Chicago
Silver Leaf Stove Polish Co., Indianapolis, Ind

Stove Repairs
Brauer, A. G., St. Louis, Mo
Brucker, M., Chicago
Dust, Wm. T. Co., Detroit, Mich
Kramer Bros. Fdy. Co., Dayton, O
Manufacturers' Stove Repair Co., Chicago
Morris, Stove Repair Co., Chicago, Ill
Reeves, S. V., Haddonfield, N.J

Stove Trimmings
Fanner Mfg. Co., Cleveland, O

Sugar Kettles
Sperry & Co., Batavia, Ill

Tapes
Lufkin Rule Co., Saginaw, Mich

Tin—Perforated
Harrington & King Perforating Co., Chicago, Ill

Tinplate
Berger Mfg. Co., Canton, O
Eller, J. H. & Co. Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Garry Iron & Steel Co., Cleveland, O
Illinois Roofing & Supply Co., Chicago, Ill
Lee-Glass-Andreesen Hdw. Co., Omaha
McClure Co., Philadelphia, Pa
Merchant & Evans Co., Philadelphia, Pa
Wheeling Corrugated Co., Wheeling, W. Va.

Tinware
Lalance & Grosjean Mfg. Co., Chicago, Ill
Stuber & Kuck, Peoria, Ill

Toasters
Rulofson Co., A. C., San Francisco

Toilet Paper Holders
Franklin Specialty Co., Reading, Pa

Trowels
Avery Stamping Co., Cleveland, O
Disston, H. & Sons, Philadelphia, Pa

Tubs—Galvanized
Wheeling Corrugat'g Co., Wheeling, W.Va

Typewriters
Remington Typewriter Co., Chicago

Ventilators
Badger Steel Roofing Co., La Crosse, Wis
Friedley & Voshardt, Chicago, Ill
Globe Ventilator Co., Troy, N.Y
Mechanical Metal Mfg. Co., Phila, Pa
Merchant & Evans Co., Philadelphia, Pa
Powers Bros., Streator, Ill

Washing Machines
Benbow-Brammer Mfg. Co., St. Louis, Mo
Brammer, H. F. Mfg. Co., Davenport, Ia
Clark, Quien & Morse, Peoria, Ill
Voss Bros. Mfg. Co., Davenport, Ia
White Lily Washer Co., Davenport, Ia

Window Fasteners
Safety Window Lock & Ventilator Co. Chicago, Ill

Wire Anchors
Lenawee Mfg. Co., Adrian, Mich

Wire Goods
Denning Wire & Fence Co., Cedar Rapids, Ia
Titchener & Co., Binghamton, N.Y

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS

HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications."

Wanted—A stock of general hardware in exchange for Iowa improved land or city property, or for $1,000 cash and security or trade for balance. Address Box 19, Lake Park, Iowa. 6

Wanted—Good opening for energetic Christian business man, thoroughly acquainted with plumbing and tinning as partner in hardware business in Michigan. Address "Good," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 7

For Sale—To close partnership, clean, up-to-date hardware with tin, furnace and plumbing shop. Invoice about $7,000, in one of the best towns in northern Illinois, 50 miles from Chicago; population 3,000; good country, good roads, good schools, good people and good pay. Address "Good Pay," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 7

For Sale or Exchange for Typewriter—Complete set of books, Plumbing, Heating and Ventilating of International Correspondence Schools of Scranton, Pa. Address V. W. Ilten, Cedar Rapids, Iowa. 6

For Sale—Hardware stock and tinshop in the best farming district of South Dakota. Stock will invoice $3,000. Only one small stock in town besides this. Reason for selling, too much to look after and need a rest. Will sell one-half interest to a right down hustler and good man. Are doing a fine business. Address Lock Box 35, Wilmot, Roberts Co., S. D. 7

For Sale—One of the best paying tinshops in Indian Territory; a good place for a live tinner; plenty of work; good reasons for selling. Address E. P. Meigs, Ada, Ind. Ter. 7

For Sale—A part interest in a $4,500 stock of hardware; located in a good community and doing a good business. Address Wright & Fleming, Paw Paw, Ill. 7

For Sale—A clean stock of hardware and agricultural implements; invoice between $2,500 and $3,000; in good town of 1,200 inhabitants in Indiana. Will sell entire stock as I am not able to take care of same. Address "J. A. H.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 6

For Sale—Well established hardware stock with tinshop in connection, in a good growing town within 40 miles of Danville, Ill. A good opening for a tinner and plumber, only one other hardware store in town of 1,300 population. Address "Sale," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 6

For Sale—$3,500; a well equipped cornice, furnace and plumbing business working from 10 to 15 men. Plenty of work the year around; no frost; four blocks from Pacific Ocean. Town of 15,000 and growing rapidly. Address W. B. Joy, 340 Pine Ave., Long Beach, Cal. 6

For Sale—$6,000 stock of hardware, stoves, furnaces, tinware, paints, oils, tinners' tools. Located in western Wisconsin; town of 5,000 inhabitants; good farming, dairying and fruit growing country. Business good, but health being poor, must retire. Address "Wis. Stoves," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. Don't write unless you mean business. 6

For Sale—Best tin and furnace business location in Illinois. All the work can do year around, $1,000. Address "Park," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 6

For Sale or Exchange for Typewriter—Complete set of books, Plumbing, Heating and Ventilating of International Correspondence Schools of Scranton, Pa. Address V. W. Itten, Cedar Rapids, Iowa. 6

For Sale—Good clean stock of hardware, sporting goods, etc., with complete tinshop in connection in best town and county in east central South Dakota. Population, 3,500; invoice $3,500; sales up to $16,000. Address Gullick & House, Brookings, S. D. 6

Wanted—To buy hardware stock in Minnesota, Wisconsin or Dakota. Give amount invoice, sales, rents and particulars about town, country and nationality people. Address Lock Box 191, Omemee, N. D. 6

TINNER'S TOOLS.

For Sale—Set of tinner's tools at once. Send for list and price. Address F. E. Taber, Clarion, Iowa. 7

For Sale—Set of tinner's tools, in fair condition; will sell cheap if taken at once; send for list. Address L. J. Beuret, Auburn, Ind. 7

HELP WANTED.

Wanted—A tinner and plumber who can speak German or Scandinavian, or both. Steady job all the year around. Man wanted who will work for our interests and not for salary alone. Address Box 93, Lakfield, Minn. 7

Wanted—Tinner used to furnace work. Address M. J. Meehan, Elgin, Ill. 7

Wanted—A good hustler to do plumbing, furnace work and general work done in connection with tinshop. A steady job for a reliable man; state wages when writing. Address Lock Box 7, Bloomington, Wis. 7

Wanted—Four salesmen having established trade in the states of Iowa, Michigan, Indiana and New York, and thoroughly experienced in the sale of metal ceilings, eave trough, conductor pipe, steel roofing and tin plate. State past experience and salary wanted. Address "B," care of Box 472, Canton, Ohio. 2t7

Wanted—At once, a good tinner; one who has had some knowledge of plumbing and furnace work; must be sober, honest and reliable. State wages and experience. Address W. F. Rehbein, Grays Lake, Ill. 6

Wanted—Four first-class non-union slaters, to such will pay 42 cents per hour and furnish steady work. Apply at 743 Republic St., Cleveland, Ohio. T. A. Parker. 6

Wanted—Cornice makers, tinners and slaters. Messinger & Parks, Aurora, Ill. 6

Wanted—At once, a good all around tinner and furnace man; one that can do a good job of plumbing preferred. Wages $15 per week; steady work all the year around to the right man. Address Grebe Hdw. & Harness Mfg. Co., Barrington, Ill. 6

Wanted—A tinner, good at spouting and general tin work; one who can clerk and take care of store when not at work in the shop. Must be strictly sober, honest and reliable, a steady place the year around. Give age and wages required. Address, A. B. Yantis, Niobrara, Neb. 6

Wanted—By energetic, hustling hardware man, eight years' experience in hardware and implements, position as salesman or manager. Best references furnished. Address E. A. Drake, Modale, Iowa. 6

Wanted—At once, first-class tinner and hot air furnace man; must be A-1, strictly sober and reliable; will pay man all he is worth. Address H. W. Kuehner, 1215 N. 5th St., Sheboygan, Wis. 5

Wanted—Plumber, one who can do some tinning preferred; state particulars and wages wanted. Address F. B. Karl, Deleware, O. 5

Wanted—A young tinner and clerk, in a hardware store; must be steady and furnish references; steady job to the right man; man from a country shop preferred; state wages in first letter. Address Johnson Bros., New Castle, Neb. 5

Wanted—At once, a good experienced tinner for country shop; good shop, good tools; state wages wanted, etc., in first letter. Address H. A. Ebert, Alden, Minn. 6

Wanted—A good, steady all around tinner and furnace man; steady job. Address, Geo. H. Bruns, Lake Mills, Wis. 5

SITUATIONS WANTED.

Wanted—Are you looking for a good up-to-date man to manage your business or as traveling salesman? If so, I can fill the bill. Address C. R. H., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 7

Wanted—Position by an experienced range foreman, one who can furnish best of reference, and a good man to take full charge of shop. Am an expert on pattern drafting. Can also lay out patterns for gas ranges. Address "Expert," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 7

Wanted by Foreman—Strictly sober, strictly business, position in sheet iron tin manufacturing company. I am up to date all round foreman in hotel range stove work, job work, cornice work, blow pipe work, acetylene gas machines and furnace work. I know how to handle under help. Address Foreman, Room 32, 81 North Clark St., Chicago, Ill. 6

Wanted—Position by middle-aged man; fifteen years' experience in hardware and farm implements in western town. Address A. B. 42, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 5

Wanted—Position by a steel range maker and all around sheet metal worker, who understands stoves and furnaces from ground up; desirous of making a change. Address "S. & F.," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 4

SPECIAL NOTICES.

WANTED.

Tinsmith for new town in Assiniaboia. Young man who understands hardware. German preferred. Apply with references, stating salary expected, to the Lennox Furnace Co., Marshalltown, Iowa. 2t-7

SALESMAN.

An experienced and well posted salesman wants a few specialties for Northwest territory. Address "Northwest," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, 1t-7

WANTED.

Salesmen calling on wholesale and retail hardware trade to handle an up-to-date line of specialties on commission. P. O. Box 837, Milwaukee, Wis. 2t-7

WANTED

Stock of hardware or implements in exchange for a good improved Iowa farm. Address "Nilco," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 4t-6

FOR SALE

The stock of "The Fort Dodge Plumbing & Heating Co." which we have taken on a bill of sale. This stock consists of about $1,200.00 worth of plumbing and heating goods, tools, safe, horse, wagon and harness, and everything necessary to continue the business. A good location; an excellent opening; reasonable rent, and easy terms to the right party. Here's the chance of a lifetime, "opportunity" knocking at your door. Act quick if you're interested. Population of Fort Dodge 16,000, and only three other shops. LEIGHTON BROS., Fort Dodge, Iowa. 3t-7

For Cottage Homes

Our lines of IDEAL Boilers, suitable for cottage warming by steam or water, were never so large and popular as in 1905.

Write any of our Branches for circulars, prices and other information.

IDEAL Boilers
IDEAL Tank Heaters
AMERICAN Radiators

AMERICAN RADIATOR COMPANY

General Offices: 282-284 Michigan Avenue, Chicago.

New York, 42-44 E. 20th St.
Boston, 44 Oliver St.
Philadelphia, 1342 Arch St.
Baltimore, 109 E. Lombard St.
Buffalo, Court and Franklin Sts.
Chicago, 282-284 Michigan Ave.
Minneapolis, 204-206 4th St., So.
Pittsburg, 926 Farmers' Bank Bldg.
Cincinnati, 336 W. Fourth St.
St. Louis, 207-209 N. Tenth St.
Omaha, 407 S. Fifteenth St.
Denver, 831 Fifteenth St.
Seattle, 1215 Alaska Bldg.
Detroit, 225 Jefferson Ave.
Milwaukee, 126 Sycamore St.

SPECIAL NOTICES.

WANTED

Now, or for 1906, one or two good and experienced salesmen for Missouri and Kansas. Joliet Stove Works, Joliet, Ill., 3t.6

SALESMAN

Wanted—First-Class Stove Salesman, on commission, for up-to-date line Steel Ranges in Ohio, Indiana, Michigan and Western Pennsylvania. Address with full references, Box S. S. care AMERICAN ARTISAN. 4t5

WANTED

"State Salesman" calling upon Department Stores, Mail Order Houses and Jobbing Hardware Trade, on Enamelware and Specialties. Address "Box 3068," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 4t-5

Hardware Dealers:

Now, to get acquainted with the hardware dealers, I will make the special offer of 500 envelopes and 500 letter heads (Bond or Flat writing; neatly printed) for $2.55, express prepaid.

Send check with order.

V. BLAKELY, Printery
North Girard, Pa.

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I can furnish COMPLETE STOVES, HEATERS and RANGES and REPAIRS as formerly manufactured by THE LEIBRANDT & McDOWELL STOVE CO.

S. V. REEVES,
114 E. Park Ave., Haddonfield, N. J.

C. N. HOOPER, Dubuque, Iowa.

VITREOUS ENAMELING
TECHNOLOGIST

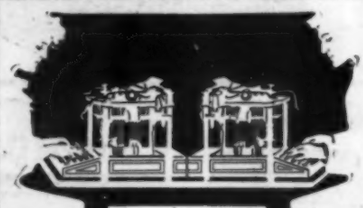
Designs, builds and starts new plants. Improves quality and reduces the costs in those already established.

We are prepared

to bid on specialties in metal work or manufacture them on royalty.

KINSEY MFG. CO., DAYTON, OHIO

The GEO. W. COPE Stove Pattern Works Cor. Brush and Woodbridge Streets, DETROIT, MICHIGAN



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that they can do more and better work with less effort on the

Remington

than on any other writing machine.

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Rely on yourself—invest your money in YOUR OWN business—advertise.

DIXON'S **STOVE** CEMENT

IN 2½, 6 AND 10 POUND PACKAGES
A SIMPLE AND DURABLE REPAIR FOR CRACKED OR WORN FIRE BRICK
SEND FOR FREE SAMPLE
JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J.

BEST POLISHES MADE

YOUR JOBBER SELLS THEM

LARGE ¾ lb CAN.

5-lb. 1-lb. 3-4 lb. PASTE
10 oz. LIQUID.

5.lb. 1-lb. 3-4 lb. PASTE
10-oz. LIQUID

10-oz. & 6-oz. cans & all sizes.

5-lb. 2-lb. 1-lb. cans & all sizes.

BLACK SILK STOVE POLISH is sold everywhere

Omaha, Neb., 12-20-04.
Black Silk Stove Polish Works,
Sterling, Ill.

Gentlemen—We have handled Black Silk Stove Polish for a number of years. Its sales have been steadily increasing since we made our initial purchase. We attribute this to its high quality and standard merit which appears to have captured the public.

Our customers write us that it is a clean polish to use, as it does not dust off, and that it does not dry out when kept in stock. Truly yours,
Lee-Glass-Andreesen Hardware Co.

Chicago, Ill., 12-19-04.
Black Silk Stove Polish Works,
Sterling, Ill.

Gentlemen—Our experience with Black Silk Stove Polish has been very satisfactory, it is free from dust and dirt and never dries out.

The only complaint that we can offer at the present time being that we have great trouble in getting enough to fill our orders. Yours very truly,
Trout Hardware Co.

If You Want Quality

IN plumbago get a sample of our No. 702 Pure Ceylon Plumbago, test it—we don't care how severe the test is—it will do all we claim, and more.

SUCCESSFUL foundrymen everywhere use our No. 702. Are you successful?

May we send you a sample?

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CINCINNATI
CHICAGO PITTSBURG
"The House of Quality and Service."

Champion Stove Clay

The only Stove Lining made of crucible materials.

Packed in 2½ lb., 6 lb. and 10 lb. pasteboard boxes.

Order it from your jobber.

The best and most refractory lining made.

Bridgeport Crucible Co. Bridgeport, Conn.

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For Stoves and Heaters.
First-class in wood and iron.

Vedder Pattern Works, Troy, N.Y.
Established 1835.

QUINCY PATTERN CO
IRON & WOOD
STOVE PATTERNS
QUINCY, ILL.

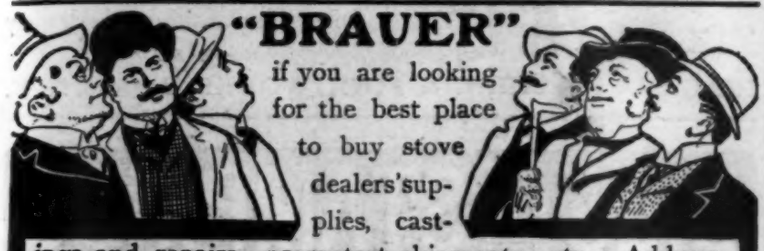
ARE YOU IN NEED

of any of the little necessities that go with a stove? We make them. Here is a partial list; Gravity Handles, Tea Pot Shelves, Pokers, Cover Lifters, Oven Door Handles, Stove Scrapers, etc., etc. We also manufacture Gas Stoves and the Arctic Fruit and Vegetable Press. Write for our catalogue.

THE FANNER MFG. CO., Cleveland, O.

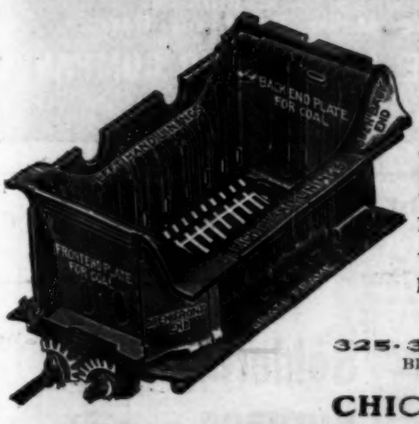
The Wise Stove Dealer orders his Stove Repairs where he can get them quickly, and at reasonable prices. We make a special feature of Rush Shipments,—and also make attractive prices,—on repairs for all Stoves, Ranges, Heaters and Furnaces. Let us prove to you by actual performance how well we can serve your interests. *A trial order will do it.*

WM. T. DUST CO., 30 Macomb Street, DETROIT, MICH.



"BRAUER" if you are looking for the best place to buy stove dealers' supplies, castings and repairs—promptest shipments, etc. Address,

316-318 North Third St. St. Louis, Mo.



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Manufacturer and Jobber of

Stove and Range Repairs

Repairs for all Stoves and Ranges. Adjustable Stove Repairs a Specialty.

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PHONE, 559 North.
CHICAGO, - ILLINOIS

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MANUFACTURERS' STOVE REPAIR CO.

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that may be used as mined, without admixture or previous preparation, adapted to the finest castings. Produces best work at low cost.

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DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS

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Furnace Repairs

J. L. Morris Stove Repair Co.
CHICAGO, ILL.

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Plastic, Durable, Fireproof. For making and repairing Linings in Stoves, Furnaces and Ranges.

The Quality is Guaranteed.

WE PAY THE FREIGHT
Large Discount.

Put up in attractive square paste board boxes in three convenient sizes.

Manufactured by

Williams Stove Lining Co.
TAUNTON, MASS.

STANDS 1800 DEGREES.

SILVER LEAF STOVE POLISH

Lasts Forever, Aluminum Paint

SILVER LEAF STOVE POLISH CO.
Indianapolis, Ind.

SAYRE STAMPING CO. SAYRE, PA.

See the Corrugation!

Note the method of corrugating and looping to prevent warping and to strengthen the plate. The handle is rigidly clamped to the stem. The stem is sharply pointed—easily driven through pipe and notched to engage edge of plate; held absolutely in place by the spring, will not turn. Plate stamped from nickled steel. The

Uncle Sam Damper

is the oldest and most reliable sheet steel damper made. It is light, strong, durable. Write for circulars.

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WE BUILD

Power Punches, Lever Punches, Lever Shears and Bolt Cutters.

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TOOLS FOR SHEET METALS

Single and Double Lock Edger.

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LEVER SHEAR.

This Lever Shear is made in seven sizes. It is a convenient tool for shearing plates, bars or angle iron. We build a complete line of Shears, Punches and Bending Rolls, all sizes, for hand or power

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DIES AND STAMPINGS

OF ALL KINDS TO ORDER

Hardware Specialties, Etc., Manufactured to Order. Send Samples or Drawings for Estimates. Write for Our Booklet. We Make Tumbling Barrels.

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Improved Quick and Easy Rising Steam, Electric and Hand Power

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You do not have to paint
Arrow Brand Asphalt Ready Roofing

When laid according to directions it will need no care for many years.

Asphalt Ready Roofing Co., 136 Water St., N. Y.

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On FIRST and THIRD TUESDAYS in each month to **VIRGINIA**
Via NORFOLK & WESTERN RAILWAY

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ALLEN HULL, D. P. Agt., Columbus, Ohio

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Soldering Furnace

AND YOU WILL MAKE NO MISTAKE

Always Ready—No Smoke—No Odor—No Noise—Unexcelled—Unequaled—Unrivaled—Safe—Sure—Durable.

GALVANIZED IRON, BRASS OR COPPER RESERVOIR.
Equipped with Cylindrical Slotted Burner.

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COLUMBUS, OHIO, U. S. A.

BARKEEPER'S FRIEND

Marble, Glass, Nickel, Brass, Copper, Tin and German Silver can all be cleaned and polished with it easier than with anything else.

Price 25c per lb.

Highest Award:—Chicago World's Fair, 1893; Louisiana Purchase Exposition, St. Louis, Mo., 1904.

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INDIANAPOLIS, - IND.

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IMPROVED OIL CAN FAUCET

J. M. LITCHFIELD
227 WATER ST., NEW YORK

Gasoline Soldering Iron and Blow Torch

Furnished with two coppers drop forged from bar, one for regular work and one for heavy roofing work. Nothing complicated. No pump to get out of order. No Platinum coils to burn out. Never too hot and never too cold. No wind will blow it out. Can be changed to blow torch instantly. Can be carried in any tool kit, or lineman's belt. Will last for years. Used by tinners, plumbers, painters and electricians. Guaranteed to give satisfaction. If your jobber does not handle them write us for illustrated booklet and price.

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The Harrington & King Perforating Co.

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OF EVERY DESCRIPTION, FOR ALL PURPOSES AND FOR SCREENS OF ALL KINDS

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None Better than IWAN'S

If There Were We Would Be Making Them

Iwan's Volcano Revolving Chimney Tops, Wire Conductor Pipe Hangers, Post Hole Augers and Diggers, Drain Cleaners, Serrated Hay Knives, etc., are unexcelled in all that constitutes first-class goods.

Your jobber or we will quote prices on application. Manufactured only by

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Streator, Illinois

Sample Conductor Hanger, FREE by Mail.

J. H. Eller & Co.

GENUINE CHARCOAL IRON TIN PLATE

METAL CEILINGS

CORNICE METAL SHINGLES SKYLIGHTS

VENTILATORS EAVESTROUGH CONDUCTOR PIPE

ROOFING & SIDING SOLDER ETC.

CANTON, OHIO.

PECKHAM & SMITH,

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Write us;—

We have sold our tools for cash through your paper. Please stop the deluge of letters. Yours is a fine medium to reach buyers.

BURTON'S Eastlake Shingles

Have been on buildings for 17 years, in good condition yet. Better than any metal, slate or wood roofing sold. Write for catalog.

The W. J. Burton Co.

DETROIT, MICH.

PORTABLE ASPHALT ROOFING

THE WORLD'S BEST

Monarch, Felspar, Slag, Asbestos, Cork, Gravel, 1, 2, 3-ply Paints, Cement. Write for Samples, Prices and Booklet.

Our line brings trade—
Gives universal satisfaction.

STOWELL MFG. CO., JERSEY CITY, N. J.

THE NATIONAL SHEET METAL ROOFING CO.

METAL SHINGLES & TILES

FROM TIN, GALVANIZED TIN AND COPPER.

REQUIRE NO PAINTING OR AFTERCARE

RUST, STORM & FIRE PROOF

LARGEST VARIETY OF STYLES

339-345 GRAND ST. JERSEY CITY, N. J.

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THE "MECHANICAL" VENTILATOR

TINNERS, CORNICE MEN, ROOFERS, METAL WORKERS, WRITE US FOR

"6 Reasons Why"

YOU SHOULD USE THE "MECHANICAL" VENTILATOR.

MANUFACTURED BY

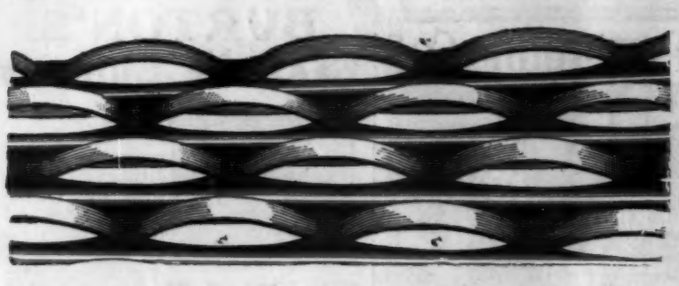
MECHANICAL METAL MFG. CO.

369 Bourse Building

PHILADELPHIA, PA.

PATENT LIGHTING PORTABLE PUNCH NO. 2; a high grade tool, adapted to all forms of curved or flange work; pays for itself every week in the year. Cap 3-16 iron. For catalog and price address

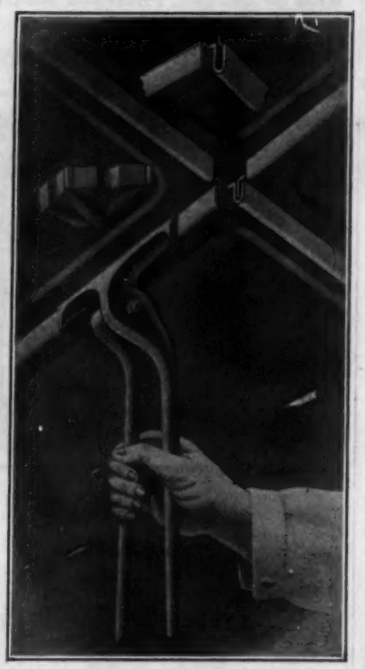
American Lock Nut Company, Oregon, Illinois.



ON the average it is the firm that knows the most about its business that wins out. We ask you simply to investigate our claims. The knowledge acquired by a study of our original methods cannot help but increase your knowledge of roofing and sheet iron products. We want you to write because we know you'll buy. Do you know why the Bostwick Steel Lath is so economical? We can tell you. We want to hear from jobbers.

Eaves Trough Conductors — Steel Lath Conductor Pipe — Metal Corner Plate Corrugated Iron, Etc., Etc.

The BOSTWICK STEEL LATH CO., Niles, Ohio



Lock-Joint Metal Ceilings

are easily erected by any mechanic, at a saving of nearly 50% in labor and furring. The edges are formed on the plates and we furnish (without extra charge) the special tongs for tightening the joints. Only 4 nails to the plate. "Absolutely Dust-Proof."

Write for Catalogue D.

S. Keighley Metal Ceiling & Mfg. Co.
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CHICAGO 378 Dearborn — BALTIMORE 15 W. German

Stay-In Flue Stoppers

Brass finished. Nicely decorated. Cannot be jarred or blown from flue hole. Guaranteed to be soot proof.

Perfection Cake Mixer

Made of No. 16 steel. It's one of the best articles on the market. Almost everybody thinks so.

STUBER & KUCK, Peoria, Ill.

Manufacturers of Pieced Tinware and all styles of Flour Sifters.

TINNERS You can save the price of a No. 10 Furnace in one year's time in the saving of gasoline over other styles; also many dollars' worth of time.

NOISELESS, NO ODOR, NO SMOKE

More Heat with Less Fuel.
Greatest Range of Heating. 3 to 12 lb.
Coppers Indoors or on a Roof.

Order direct of your Jobber, or we will ship direct for $6.50.

GEO.W. DIENER MFG. CO., 217 E. Lake St., Chicago

Roofing versus Readiness

Read the advertisements of any trade paper, listen to the tale of any drummer, peruse the catalog of almost any institution and you will learn about **quality** and **prices.** You will hear that Jack Nimblelegs stole a march on all competitors and is offering a genuine charcoal iron 10 per cent. off other quotations. You will learn that his competitor has discovered a new process whereby tin plate can be made cheaper and better. But you will strike no argument requesting patronage because of superior **service.**

Service counts. It counts just as much as **quality** and **price** and perhaps more. The average customer values quick work, quick shipments. Other things being equal he will invariably give his order to the man who is in a position to do a job promptly.

Our house has long been known as the house of **quality** and **economy.**

It has always been the house of good **service.** We combine all **three** features.

Our immense stock of Conductor Pipe, Eaves Trough, Gutters, Roofing, Siding, Corrugated Iron, Tin and Terne Plates, etc., is varied and thorough. You can find anything you want and what's more we will get it out for you the same day the order is received.

Garry Iron & Steel Company
CLEVELAND, OHIO

GOTHIC DESIGN

Art Metal Ceilings

Exclusive and Artistic Designs,
Perfect Fitting Plates,
Dust Proof Joints.

Write for Prices and Catalog "A"

Estimates and Plans furnished free of charge.

Write for 50-page supplement to Catalog "A"

For Architectural Sheet Metal Work, Galvanized and Copper Cornices, Roof Gutters, Curved Mouldings, Skylights, Finials, Ventilators, Metal Shingles, All Styles Roofing and Conductor Pipe, Eaves Trough, Elbows, Shoes, Etc.,

Write for prices and Catalog "B"

Kanneberg Roofing & Ceiling Co.

Manufacturers,
CANTON, OHIO, U S A.

THE

"Big Four Route"

passes through an interesting Country every mile of the way

CHICAGO TO

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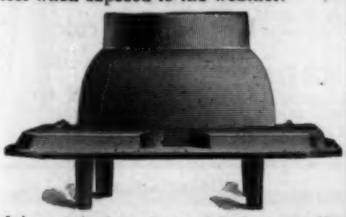
Buffet Parlor Cars or Dining Cars on day trains, and Pullman's finest Compartment and Standard Sleepers on night trains. All trains run solid, Chicago to Cincinnati. The only line from Chicago connecting in the Central Union Depot, Cincinnati, with C. & O., Q. & C., L. & N. and B. & O. S. W. R'ys. For reservations, etc., call on or address

J. C. TUCKER, G. N. A.
258 Clark St., Chicago.

The Best Chimney Cap

This cap as illustrated below is made of cast iron and is designed to replace the old style galvanized sheet iron hood. The Best will last a lifetime, for cast iron will last longer than any other form of iron or steel when exposed to the weather.



It is made in three sizes and the legs are adjustable. The legs project inside the chimney to prevent the cap from blowing off. It is not necessary to use mortar or cement to fasten this cap to the chimney as the legs will keep it in place.

This is a Good Thing. Has Merit. Write for Prices

Put up in half doz. and one-third doz. crates. If your jobber does not handle the Best write to us.

STERLING FOUNDRY COMPANY, STERLING, ILL.

Berger's "Classik" Steel Ceilings

Ask for Our Latest Prices on

Berger's Steel Office Furniture.

BERGER'S

GENUINE GUARANTEED

CHARCOAL IRON SPECIALTIES

Roofing, Siding, Eave Trough, Conductor Pipe, Tin Plate, Etc.

THE BERGER MFG. CO.
CANTON, OHIO

Cornices, Finials, Crestings, Skylights.

Black and Galvanized Sheets.

Art. 8-19-5.

The Kind You're Looking For

Outside Bead

The famous One-Piece Miter, made of one piece of metal, galvanized or tinned after being formed. Has more space at the bend than can be gotten in a pieced miter. There is therefore no overflowing of water. Fits all standard gutters, single or double bead, slip or lap joint, inside or outside turn.

Write for information.

It is imitated. Get the original.

J. E. Whitacre Mfg. Co.

ROCKFORD, ILL.

Inside Bead

H. A. Goold, Hiawatha, Kans., writes April 3, 1904: "You may discontinue my ad, as I have had so many answers that I was surprised. Your paper is well worth the subscription price, and I cannot see how any tinner wants to get along without it."

We Manufacture STOVE PIPE and One-Piece Corrugated, Four-Piece Plain and Adjustable Elbows

Stove Pipe Crated Ready to Ship

Made in all Grades of Iron

3 in., 4 in., 4½ in., 5 in., 5½ in., 6 in., 7 in.

We Ship Quick — Send Us Your Orders
Our Prices Are Right — Buy the Best

Wheeling Corrugating Co.

Main Office and Works, WHEELING, W. VA.

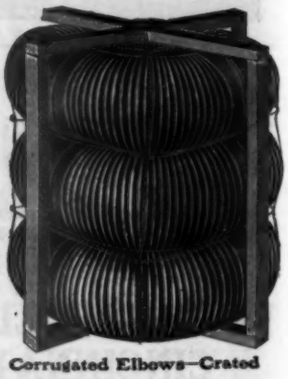
Branch Offices and Warehouses:

NEW YORK CITY	47-51 Cliff Street
CHICAGO	45 and 47 Lake Street
ST. LOUIS	112, 114, 116 South Eighth Street
PHILADELPHIA	402, 404, 406 Race Street
BOSTON, MASS.	132 and 134 Pearl Street

CHATTANOOGA, TENNESSEE

Large Stocks of all our Products are Carried at the Factory and in all the Warehouses.

4-Piece Elbows—Crated



Corrugated Elbows—Crated

Locations for Industries

Erie Railroad System Chicago to New York

The Erie Railroad System's Industrial Department has all the territory traversed by the railroad districted in relation to resources, markets and advantages for manufacturing, and can advise with manufacturers of specific products as to suitable locations, furnishing them with current information of a comprehensive nature, dealing with the project in its full relation to manufacture and commerce.

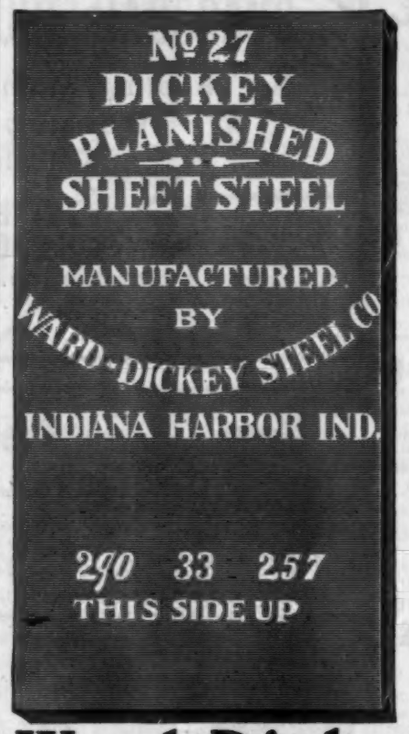
The Erie is one of the greatest of trunk lines. Its own rails connect the two largest cities of America.

Every section of the System has its particular merits. It has great general and coal, oil and natural gas resources,

It is important in this age of modern facilities for manufacturers to locate where they can obtain side tracks so as to receive from and ship directly into cars at the factory. Information can be promptly furnished in this connection about every point on the system between Chicago and New York.

Manufacturers' inquiries as to locations are treated in strict confidence and absolutely reliable information, so as to promote permanent traffic, is furnished. Address

LUIS JACKSON
Industrial Commissioner
Erie Railroad Company
21 Cortlandt Street, New York



Hammer Planished

Open Hearth steel sheets for Stoves, Ranges, Stove Pipe, Elbows, etc. Soft — Tough — Never Breaks— Takes long and high heats and holds its color. Send for price list. Gauges No. 18 to 28.

Manufactured by

Ward-Dickey Steel Co.

INDIANA HARBOR, IND.

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In the expansion of business now bringing profit to so many manufacturers, advertisers who have made themselves regularly prominent in the past five years have been notable in reaping the rewards of persistent publicity.

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Galvanized Steel Tanks for all Purposes.

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EAVE-TROUGH-CONDUCTOR

CORNICES!

SKYLIGHTS!

QUICK SHIPMENTS!!!

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ROOFING SLATE

SLATE BLACKBOARDS

E. J. JOHNSON & CO.

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Quarries: PENNSYLVANIA AND VERMONT

Prices quoted delivered anywhere. Booklet and complete Price List on application. Wire inquiries given quick attention

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ROOFING SLATE

SLATERS' SUPPLIES.

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Write for Prices on

ROOFING SLATE

THE AULD & CONGER CO.

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CLEVELAND, O.

ORNAMENTAL PIPE STRAPS

The most perfectly cut and brightest tinned straps ever sold. **Malleable and Wrought Hooks**, quality the best that can be made. Full line of Valves and Plungers. Ask for samples, catalogue and prices.

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The No. 1 Will Help Make a Happy Home for You.

$6.00 NET

There is no question about it. Thousands of mechanics will tell you it is really adding to their happiness and making it possible for them to have and enjoy more of the good things than they otherwise could. **This Fire Pot adds Large Round Dollars to the user's income.** Jobbers sell at factory price under our guarantee "Your money back if it does not please." Our catalog is free. It tells about the money-making and saving advantages found in the No. 1 fire pot.

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TINSMITHS' & PLUMBERS' TOOLS.
CORNICE MAKERS' TOOLS.
COPPERSMITHS' TOOLS.
PIPE THREADING MACHINES.

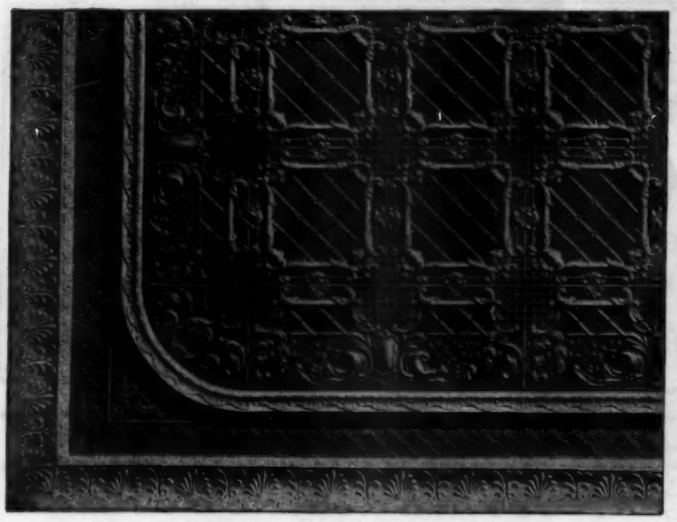
SECOND-HAND GOODS BOUGHT, SOLD AND EXCHANGED.

The Wheeling Corrugating Company, WHEELING, W. VA.

Manufacture **WHEELING CEILING** Made of Steel

The largest and most artistic variety of designs in the world

Send plan or sketch showing detailed measurements and we will be pleased to furnish Drawings and Estimates free of cost for rooms of any size or shape.



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THEY ARE FIRE-PROOF

Practically Indestructible.
The Most Artistic Interior Finish.
Designed for Rooms of All Kinds.
Easily Applied.
Moderate in Cost.

Large Stocks of all our Products are carried at the factory and in all the warehouses.

Branch Offices and Warehouses:

New York City	47-51 Cliff Street
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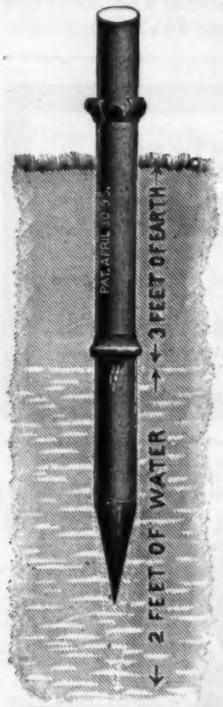
Philadelphia	402, 404, 406 Race Street
Boston, Mass.	132 and 134 Pearl Street

CHATTANOOGA, TENNESSEE.

WE SHIP QUICK



Lightning Conductor Ground Rod

(Patented April 30, 1895.)

With Automatic Water Supply

The ground rod is the most important part of the rod. Sometimes the ground is perfectly dry, and the deeper the harder the ground is in some localities. By our invention you can be sure of two feet or more of water all the time in the rod and moist earth around the point in the ground. It is made of ⅝-inch pure copper tube, and sells for 25c per foot; no more or no less. We want to furnish it to a responsible dealer in every town.

Write for Catalogue.

The Security Lightning Rod Co.

Burlington, Wis.

The Dayton Swing Chimney Top

The easiest turning chimney top made. Guaranteed to work where others fail. All sizes from 4 to 24 inches.

Manufactured by

The Kramer Bros. Fdry. Co.
DAYTON, OHIO

Largest Manufacturers of Swing Tops in the World

High Grade Porcelain and Majolica Enameling

In all shades and colors, on steel, sheet and cast iron.

Our Porcelain Enamel is unexcelled for stamped steel Kitchen Sinks, Refrigerator Linings, Lamp Shades and Ventilators, steel and cast iron Registers, Steel Ranges and Steel Stoves of any description and cast iron Stove Reservoirs, etc., etc.

Cast Iron Parlor Stoves or any other cast iron stoves enameled with our Majolica Glazes are an ornament to any home. We have thirty years' experience in this line and there is nothing new about our enamels. They have all stood the test.

Estimates and information cheerfully furnished upon receipt of samples and particulars.

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"Nothing except the mint can make money without advertising."—Gladstone.

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Standard Quality and Workmanship Guaranteed. Prompt Shipment. Prices Right.

Simple in Design. Elegant in Finish.

No. 75

Send for Descriptive Catalogue and Prices.

EDWARD S. HOTCHKISS,
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"GRAND RAPIDS"

ALL STEEL SASH PULLEYS

are the greatest selling goods on the market anywhere. We are the largest makers of sash pulleys in the world. The "GRAND RAPIDS" are the standard sash pulleys. We make nothing but sash pulleys, so, naturally, our goods excel.

We own twenty-three patents on sash pulleys, therefore our goods are exclusive. Nearly all jobbers sell the "GRAND RAPIDS." Write us for free samples, catalogue and discounts.

THE GRAND RAPIDS HARDWARE COMPANY,

Manufacturers

61 Pearl Street, GRAND RAPIDS, MICH.

WE MANUFACTURE TO ORDER
DIES, TOOLS AND AUTOMATIC MACHINES
ALSO HARDWARE SPECIALTIES AND PATENTED NOVELTIES
ESTIMATES FURNISHED ON EXPERT MODEL WORK. SEND DRAWING OR SAMPLE.
BOOKLET FREE. WRITE TODAY.
Stamping & Tool Co.
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CORNICE COPPER

Soft and Cold Rolled—all sizes. Boiler Sheet Copper and Bottoms.
All kinds of Tubing, Rod, Sheet and Wire in Copper and Brass.

Send for Stock List of what we carry in our store.

CHICAGO BRASS COMPANY
Successor to Benedict & Burnham Brass and Copper Co.
211-213 LAKE STREET, CHICAGO

"Genuine Worcester" Roofing Plates

"Trade Mark M&E ©

The above well known brand will be found the same to-day as formerly. No deviation in the character and quality.

Get our prices.

MERCHANT & EVANS CO.

Philadelphia, New York, Brooklyn — Successors to MERCHANT & CO., Inc. Sole Manufacturers — Baltimore, Chicago, Kansas City

Put Up a Good "Front"

If You Want to Succeed

and this applies to the Building as well as to the Owner.

Our metal store fronts have the **appearance of success that begets success.**

TO DEALERS: Write us about your own front or the one **you** can sell to the other fellow. Catalogues and prices on request.

We manufacture everything in sheet metal.

ST. PAUL ROOFING CORNICE & ORNAMENT CO., St. Paul, Minn.

CORTRIGHT METAL SHINGLES

Tinners:
Couldn't you lay these Metal Shingles as profitably as a plain tin roof? Certainly. Write us.
Cortright Metal Roofing Co.
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SHEET BRASS, All Tempers. BRASS and BRONZE DRILL RODS.
BRASS and COPPER WIRE. GERMAN SILVER SHEET and ROD.
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Eagle Brand Copper Rivets and Burrs, Brass Escutcheon Pins

Brass Butts, Desk Narrow, Broad Middle, Ball Tipped and Water Closet

Brass and Iron Jack Chain, Brass Safety Chain, Etc.
Catalogues on Application.

NEW YORK **THE PLUME & ATWOOD MFG. CO.** CHICAGO

The Canton Steel Roofing Co.

CANTON, OHIO

Long Lengths Galvanized and Copper Eaves Trough in Lap and Slip Joint, Plain Round, Corrugated Round and Corrugated Square Conductor with Elbows, etc.

Prices being equal, why not buy from us as our goods are superior to others both in construction and quality.

The stamp of excellence is on every piece. Let us tell you about our Lock Joint. Get our catalogue No. 24 and prices. We can please you.

CANTON, OHIO

The Canton Steel Roofing Co.

This Label on all Taplin's Pat. Improved Dover Egg Beaters stands for Quality and Durability.
THE TAPLIN MFG. CO., New Britain, Conn., U.S.A.
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Works Like a Charm—Never Fails
Material and workmanship highest grade. Low in Price.
"If it's 'PULLMAN'—it's right."
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POCKET LEVELS

Boxwood and Ivory RULES PLUMBS and LEVELS Gauges

PLANES Hand Screws, etc., etc. BEST Workmanship and Finish.

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Address Lock Box 13 PINE MEADOW, CONN., U. S. A.

$25 ON 5 TON
Is what you can save
We make all kinds of SCALES.
WRITE FOR PRICES
Also B. B. PUMPS and WIND MILLS
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Satisfactory Inducements,
Favorable Freight Rates,
Good Labor Conditions,
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AND THE
YAZOO & MISSISSIPPI VALLEY R. R.

For full information and descriptive pamphlet address

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A CALL FOR "GOOD" TOOLS

is being made by the most intelligent mechanics the country over. Those who are most exacting and proud of their outfits select "OHIO" TOOLS—tools that they know have been tried and tested for years and found to be of superior quality.

Is it not to the dealer's interest to handle goods that give such universal satisfaction?

Our line includes Planes, both Iron and Wood. Chisels, Gouges, Drawing Knives, Auger Bits, Bench and Hand Screws, Etc.

NOTE—WE DO NOT SELL CATALOGUE HOUSES

OHIO TOOL COMPANY

New York Office, J. C. McCarty & Co., 10 Warren St. Factories: Columbus, Ohio; Auburn, N.Y.

No. 5, $4.00 Each

We are producing this Level to give users all the advantages of a full brass bound level at a nominal price. The stock is very choice selected cherry, corners are heavy, tips cast, and especially hard, to stand wear.

A beautiful Level, polished and strictly first class. Packed one in a box, and six in a case. Any dealer can handle a case very quickly. Write for discount.

THE BAKER-McMILLEN CO., AKRON, OHIO, U. S. A.

STANLEY RULE AND LEVEL CO.

IMPROVED CARPENTERS' TOOLS

Sold by All Hardware Dealers NEW BRITAIN, CONN.

1905
Ocean Wave Washer
With Covered Gear

You want the exclusive agency?
WRITE US.

VOSS BROS. MFG. CO.
Davenport, Iowa

E. H. TITCHENER & CO.

Headquarters for
STAPLES AND THINGS.
Binghamton, N.Y.
and 42 N. Peoria St., CHICAGO.

Peoria Washing Machines
Best in the Market—Made With Ball Bearings

Have a Compound Lever Handle which greatly reduces the work of wash days. The motion used in vibrating the handle takes the strain from the back and lets the arms do the work with a great reduction in labor.
Send for Catalogue. Secure the Agency.

CLARK, QUIEN & MORSE
PEORIA, ILLINOIS

Any dealer can be master of the trade if he handles our

IMPROVED SCHROEDER ROTARY
ROLLER GEARING WASHER.

Has no clutches, springs or trigger to get out of order. Nothing to break, always in gear, runs backward or forward. Made of the best material.

A sample washer will prove to you that we have a trade winner. Write for particulars.

The Benbow-Brammer Mfg. Co., ST. LOUIS, MO.

Stop and Think!
6,000

live hardware dealers find the White Lily Washing Machine the best washer and best seller on the market.

If you have not got a reserved seat on the band wagon, you had better write to-day.

White Lily Washer Co.
Toledo, Ohio Davenport, Iowa

The Hand Screw with the Saw-Cut Thread

The Best That Money Can Buy.

Our Hand Screws are the result of 15 years' experience in making Cabinet Maker Clamps, Etc. We make a complete line of Cabinet Clamps, Cabinet and Manual Training Benches and Factory Trucks.

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GRAND RAPIDS HAND SCREW CO.
160 South Ionia Street, GRAND RAPIDS, MICH.

We help you—by creating the demand and sending the trade to your store for

O. K. WASHING MACHINES

The O. K. Washing Machine is **good in every detail**, and we're telling our story in several of the widely read Farm Journals.

In all of our advertisements we say "Your Dealer has the O. K."

It's to your interests to sell the O. K. and meet the rapidly growing demand.

You'll find our booklet and prices interesting.

H. F. BRAMMER MFG. CO., Davenport, Iowa

P. E. D. UNDERWOOD, Sullivan, Ill., writes:

"I value your paper very highly as authority on the subjects it treats."

"NEVER-BREAK"

Steel Spiders, Griddles and Kettles are made correct in thickness. Any lighter utensils will warp, scorch and burn.

See that "NEVER-BREAK" is branded on the handle of Steel Spiders. It will prevent substitution of inferior goods.

"NEVER-BREAK" Spiders will not rust in stock, being heavily lacquered.

They will not soak up grease like cast iron ware does.

They are always sweet, clean and hygienic. No dangerous enamel to chip off.

"NEVER-BREAK"

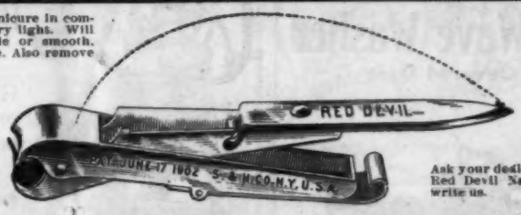
STEEL SPIDERS, MIRROR POLISHED.
GRIDDLES, MIRROR POLISHED.
KETTLES, DOUBLE TINNED.
SHOVELS, SPADES, SCOOPS.

Write for catalogue, etc.

THE AVERY STAMPING CO.,
CLEVELAND, OHIO.
SOLE MFRS. "NEVER-BREAK" GOODS.

No. 91 RED DEVIL NAIL CLIPPERS.

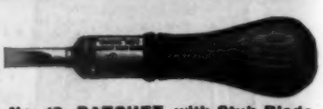
A complete manicure in compact form. Very light. Will cut or trim, file or smooth, clean and shape. Also remove hang nails.



Ask your dealer or jobber for Red Devil Nail Clippers, or write us.

SMITH & HEMENWAY CO., MFRS. CUTLERY AND HARDWARE.
296 BROADWAY, Dept. 91, NEW YORK.

"Yankee" Screw Drivers



No. 12—RATCHET, with Stub Blade.

HAVE NO EQUALS.

No. 11—RATCHET, Right and Left Hand and Rigid.

THEY ARE SOLD BY LEADING JOBBERS.

No. 15—RATCHET, With Finger Turn on Blade.

Send for "Yankee" Tool Book.

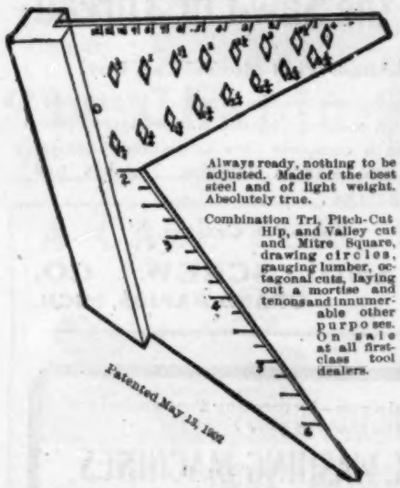
No. 30—SPIRAL RATCHET, Right and Left Hand and Rigid.
No. 31— " " Heavy Pattern.
No. 20— " " Right Hand only (3 sizes).

North Bros. Mfg. Co., Philadelphia, Pa.

New Universal Square

Made in Three Sizes

No. 1	6 inches	$0.65
No. 2	10 inches	1.00
No. 3	13 inches	1.50



Always ready, nothing to be adjusted. Made of the best steel and of light weight. Absolutely true.

Combination Tri, Pitch-Cut Hip, and Valley cut and Mitre Square, drawing circles, gauging lumber, octagonal cuts, laying out a mortise and tenons and innumerable other purposes. On sale at all first-class tool dealers.

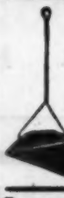
Patented May 13, 1902

THE DUBY & SHINN MFG. CO.
INCORPORATED
Nelson Bldg., 19 Park Place, New York City
(Please mention The American Artisan.)

COMBINATION

Toilet Paper Holder

This handsome article speaks for itself. Upper part highly nickeled; heavy wire, copper plated; the wood rod is a dead ebony black; include match strike and cigar receptacle. Write Franklin Specialty Co., Reading, Pa. 5, 10 and 15 cent hardware articles our specialty. Chicago office, 189 Lake St.



WHO WOULD STOOP SO LOW

as to use an ordinary Dust Pan, when they can get a "20th Century Dust Pan" for 25c, which requires no stooping, takes up the dust cleaner, and being made of the best Polished Steel, will last longer than ten ordinary Dust Pans. The people want it, and it pays to supply them with what they want.

SCHOFIELD & CO., MFRS.
FREEPORT, ILL.

PATTERN LETTERS
WE HAVE THEM
SIZES, ONE EIGHTH TO TWO INCHES.
ROMAN, ROUND FACE GOTHIC, SHARP FACE GOTHIC, HAIR-LINE GOTHIC, FLATTENED FACE GOTHIC, ANTIQUE FONTS AND REVERSED FACES FOR BRANDING IRONS.
ST. LOUIS ELECTROTYPE FOUNDRY
214-216 PINE ST. ST. LOUIS, MO.

MANUFACTURERS

Write us for information about Good Locations in Alabama, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Southern Illinois, Southern Indiana, Tennessee and Virginia, in the territory of the

SOUTHERN RAILWAY AND MOBILE & OHIO RAILROAD

For your industry. We have advantageous locations for almost every sort of

MANUFACTURING PLANT

Where conditions of Production and Distribution are favorable. We have the Iron, Steel, Timber, Fuel, Transportation Facilities, Markets. No section surpasses ours.

M. V. RICHARDS,
Land and Industrial Agent
Washington, D. C.

CHAS. S. CHASE, Agent, 722 Chemical Building, St. Louis, Mo.
M. A. HAYS, Agent, 225 Dearborn Street, Chicago, Ill.

Measuring Tapes

Steel, Metallic, Linen, etc. Our Goods are Recognized as the Best. Tinners' Rules, Magic Pattern Rules, etc. Send for Catalogue and Mention The American Artisan.

Lufkin Rule Co.

SAGINAW, MICH.

Blick No. 3 The Best Box
FOR RURAL FREE DELIVERY

$5.88 Per Dozen

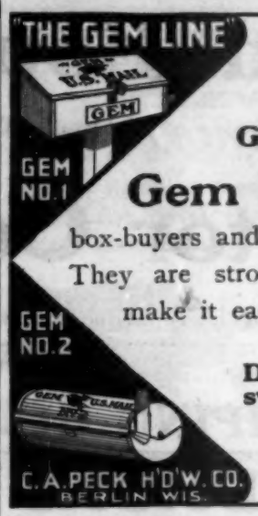
BE JUST WITH CUSTOMERS

Sell them Blick No. 3 boxes. They are big ones, 6½x8½x19 inches. Made of heavy galvanized steel. Painted green, the new Government color. Same shape and color as city boxes. Have Positive-Locking Flag Signal, Automatic Latch, Water-Tight Quality. Every box tested, every box right, every box warranted. They will get the business. You better get them. Order now.

$5.88 per Doz.

BLICK-WILLIAMS CO.
INDIANAPOLIS, IND.

"THE GEM LINE"



Hustle

Gets the mail-box business.

Gem Boxes please 99 per cent of box-buyers and they yield a **mighty nice profit.** They are strongly built, fine-appearing boxes and make it easy for you to get other business.

Don't let your customers be swindled by a peddler.

All jobbers handle "The Gem Line"

C. A. PECK H'D'W. CO.
BERLIN, WIS.

MAKE MORE MONEY

Rural Routes are going in all around you. You can get this business with the **SIGNAL MAIL BOX**

It is the original box for Rural Routes with special endorsements of Postmaster General. The best made, the best liked, the easiest sold and the best advertised.

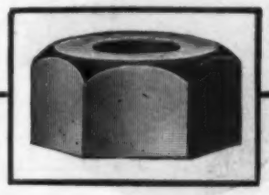
SIGNAL MAIL BOX CO.
106 Benton St., Joliet, Illinois

INDEPENDENT R. F. D. Mail Boxes
ARE RIGHT AT RIGHT PRICES
Ask about them

Independent Mfg. Co.
Cleveland, O.

CHICAGO
To MILWAUKEE
GRAND RAPIDS
MUSKEGON and
GRAND HAVEN

City Ticket Office 103 Adams St.
Docks Foot of Michigan Avenue



Cold Punched NUTS

HIGH GRADE
GOOD LOOKING
ACCURATE

Semi-Finished NUTS

GARLAND NUT & RIVET CO.
PITTSBURGH, PA.

When things aren't going quickly, and you can't use twine;
When cobwebs gather thickly, just drop us a line.

THE AMERICAN ARTISAN
Want Ads fill your wants.

KNOWLEDGE OF EVERYTHING

in his particular province was what made Napoleon a great man. He never conducted a campaign, never wrote a letter, never bought a hat, without having investigated the matter thoroughly. Lots of hardware dealers are only partiallly successful because they lack a thorough knowledge of the very goods they sell. Lots of people are trying to sell clumsy, flimsy, clap-trap arrangements, improperly called mail boxes, simply because they have never taken the trouble to investigate

OPEN

THE IDEAL

CLOSED

C. G. FOLSOM, South Bend, Indiana

Get a Solid Foundation

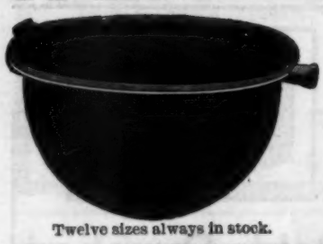
Coal hods are built to work. They're made to carry loads. They've got to be strong, durable, well constructed.

Victor Coal Hods

are reinforced at the bottom. They are made to last. The construction is patented in the United States, Great Britain and Canada.

THE VICTOR STAMPING CO., BROADWAY LOVELAND, OHIO

SPERRY'S CALDRONS



Twelve sizes always in stock.

Full measure, guaranteed perfect, original patterns, with metal distributed where it is needed. Many Caldrons are made from our castings as patterns. They are inferior to originals, as they have light bottoms and heavy sides and hold less.

D. R. SPERRY & CO. HOLLOW-WARE FOUNDERS **Batavia, Ill.**

A Seasonable Article For this Fall & Winter

The 20th Century White Flame
HEAT & LIGHT IN ONE

Wholesalers Are Placing Their Orders Now To Insure Supply for the Fall and Winter Demand.

GAS BURNERS GIVING HEAT AND LIGHT

At Cost of LIGHT ONLY.

FITS ANY GAS FIXTURE—HEATS AND LIGHTS ANY ROOM.

RETAILS AT $1.25—Good Margin for Jobber and Retailer—Big Seller.

For fuller particulars, address,

20TH CENTURY MFG. COMPANY, 19 Warren Street, N. Y.

Manufacturers of the Famous Bicycle and Automobile Headlights

ROSENBERG'S

BURGLAR PROOF

Sash Lock and Ventilator

Permits the sash to be raised from the bottom or lowered from the top for desired ventilation without sacrificing security from entrance by burglars.

It is impossible to reach over the partially opened window with the hand, a pronged stick or anything else to unlatch the bolt.

The window cannot be raised or lowered with a crowbar in either opened or shut condition.

No "jimmy," knife-blade or clock spring can be inserted to open *this* lock.

It can only be operated from the INSIDE of the room.

To attach it no cutting of sashes is necessary.

It is the **only absolutely burglar-proof ventilator lock** in the market, and is enthusiastically endorsed by Architects, Builders, Dealers and Consumers.

Draws the Sashes tightly together and locks at any desired point.

RETAIL PRICE:

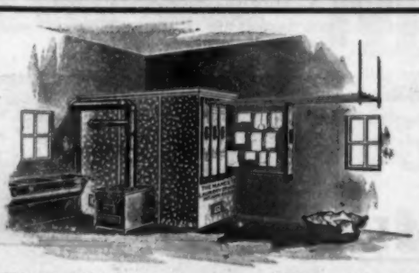
25c, 35c and 50c, according to Style and Finish.

Free to Every Dealer, a handsomely embossed four-colored display card and wire easel with sample locks attached, who writes for wholesale prices and terms.

SAFETY WINDOW LOCK & VENTILATOR CO.

17-21 QUINCY ST., CHICAGO, ILL.

LIVE SALESMEN WANTED.



The "Manest" Laundry Dryer

is for family use. It boils the clothes, dries the clothes, and heats the irons with one fire.

Good Profits to Agents.

THE MANNEN & ESTERLY CO., - **Cleveland, Ohio**

Sole Manufacturers.

No Dust, No Dirt

Pleases everybody

Quick Seller

Order at once to insure prompt delivery.

Send for prices.

HILL DRYER CO.

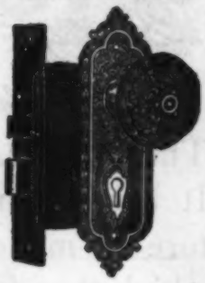
Worcester, Mass., U. S. A.

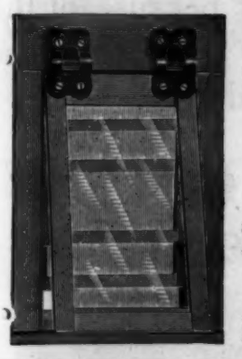
THE TAYLOR & BOGGIS FOUNDRY CO.

CLEVELAND, OHIO

MANUFACTURERS OF **LIGHT GRAY IRON CASTINGS**

Builders' Hardware, Dampers and Damper Clips, Oil and Gas Stoves, Furnace Lamps, Molasses Gates, Letter Boxes, Hardware Specialties.





Full length window screens keep out all the flies and protect the windows. Screens attached with

GOSSETT'S Detachable Suspension HINGES

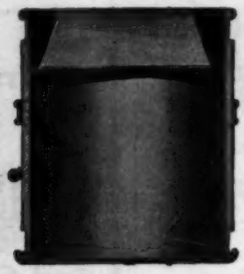
are easily put up or removed—no tools or ladder necessary. Write for free sample pair.

Sold by Hardware Jobbers and Dealers.

Manufactured by

F. D. KEES, Beatrice, Neb.

A NOVEL MILK PAIL



Patent For Sale

Patent No. 790,065, Filed Jan. 5th, 1905, Serial No. 239,740.

MILK PAIL.

Will receive sealed cash bids until Nov. 1st, 1905. Printed copies of the specifications and drawings can be had for 5 cts from the commissioners of patents, Washington, D. C.

Patentee, **Fred W. Lechner**, Wenona, Ill., R.F.D. No. 11

MANUFACTURERS

Contemplating establishing plants in the West should take advantage of a location on

THE NORTH-WESTERN LINE C.&N.W.R.

Chicago & North-Western Ry.

which reaches the famous

Water Powers, Coal Fields, Iron Ore Ranges, Hard and Soft Lumber Districts

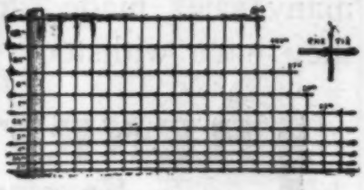
of the West and Northwest, and affords the best means of transportation to the markets of the world. For further particulars apply to

MARVIN HUGHITT, Jr. — Freight Traffic Mgr.

CHICAGO

E. D. BRIGHAM, — Gen'l Freight Agent

The Fence That Suits



Your Customer

Is the one for you to handle.

Woven Field Fencing

Both Single and Double Strand.

JUMBO POULTRY turns everything.

Lighter Poultry for less money of Various Weights.

Lawn and Cemetery Fence, Barb Wire, etc.

SEND FOR CATALOGUE.

THE DENNING WIRE & FENCE CO.

CEDAR RAPIDS, - IOWA.

Our STEEL CEILINGS, CORNICES and SKYLIGHTS

are the best on the market. We also manufacture Roofing, Sidings, Eave Trough and Conductor Pipe. Quick shipments guaranteed. Our new catalog for the asking.

Badger Steel Roofing & Corrugating Co.

LA CROSSE, - WISCONSIN

C. De Witt Wagner, 40(Third Ave., Cedar Rapids, Ia., writes: "Please accept my thanks for your help in securing a tinner for me. I had letters from several states which goes to show that The Artisan is read."

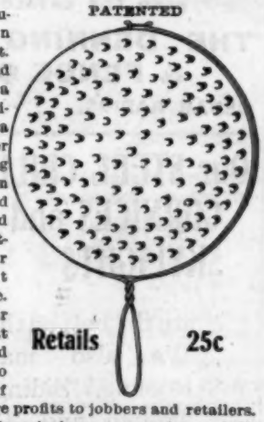
Quality Tells

That's why Disston's Saws are known throughout the world. It has taken years of patient experimenting and great expenditure of money to bring Disston's Saws to the point of perfection which they have attained. Lumbermen can attest to the superiority of our saws. Hardware men know they are good because of the many sales made, and customers know they are good because they have withstood the wear and tear of time and toil.

HENRY DISSTON & SONS
Keystone Saw, File and Tool Works
PHILADELPHIA, PA.

JUST OUT!
Rulofson's California Toaster

PATENTED



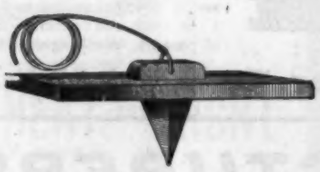
Makes beautiful golden brown toast. Heats rolls and biscuits to a nicety; substitute for a double boiler preventing scorching; an ideal bed warmer and carriage heater—better than a hot water bottle. The popular price (25c) at which it is sold commends it to all class of buyers. Large profits to jobbers and retailers. Advertised largely in many popular periodicals. WE PAY THE FREIGHT. Write for special prices and exclusive territory.

Retails 25c

A. C. RULOFSON CO.
Sole Manufacturers and Patentees
CROSSLEY BLDG., SAN FRANCISCO, CAL.

Write for Our Circulars

and we will tell you what's doing in the Fence Anchor business.



The only Anchor made for between the posts and for corner posts.

LENAWEE MFG. CO.
ADRIAN, MICH.

4 Trains a Day
via the
MONON ROUTE
CHICAGO, INDIANAPOLIS & LOUISVILLE RAILWAY
and C. H. & D. Ry.
Only 8 Hours
from
CHICAGO
to
CINCINNATI
BY DAY, Parlor and Dining Cars
BY NIGHT, Palace Sleeping and Compartment Cars.
CHAS. H. ROCKWELL, Traffic Manager. FRANK J. REED, Gen. Pass. Agt.
200 Custom House Place, CHICAGO.

J. W. ROBISCH, Jefferson, Wis., writes: Thanking you for sending your valuable paper regularly, as I could not get along without it. Having recently branched out in the hardware business, your paper is more valuable than ever. 6-3-05

HURWOOD TOOLS ARE FAMOUS TOOLS

No. 0
TUBULAR
BISHOP

The patent attachment for lifting and swinging the globe out of place is the result of years of experiment and does away with the annoyance attendant in filling, lighting or trimming of the old styles. The device is so simple that a child can raise and swing the globe out from the frame in less than a second of time. The globe may be removed easily when it is desired to clean it and can be replaced with as little effort.

THE HURWOOD MFG. CO.

INCORPORATED

BRIDGEPORT, CONNECTICUT

No. 2
COLD BLAST
BISHOP

We have also added an attachment for keeping the bail in a vertical position, unless turned down, making it easy for the user when it may be necessary or convenient to set it on the ground.

Another and very important improvement provides a clear, white flame and makes it wind and jar proof.

The Bishop is the very best lantern obtainable and is in keeping with all our novelties, inasmuch as we adopt the best only.

Our catalog will give you a better idea.

The Home Pride Range, in Charcoal Iron, or Better, Blue Steel.

18, 20 and 23 inch ovens. Heaviest in material and richest in finish. Right and left hand flush reservoirs.

If you haven't the Home Pride Agency, write for catalogue. No greater effort is required to sell the best than the poorest. The abundant crops will bring a demand for the best. Be in a position to meet this demand.

Home Pride Range Company

MARION, INDIANA

Warehouses: Lincoln Des Moines Minneapolis

THE CONSOLATION HANDICAP
AT THE
GRAND AMERICAN

held at Indianapolis, June 27-30, 1905, was won by Mr. James T. Atkinson, score 99 out of 100, from the 18-yard mark, using

PETERS' FACTORY LOADED SHELLS.

This was the only event during the entire Grand American which was won from behind the 16-yard line.
Many other notable scores were made with Peters' Shells, among them the following:

1st on Practice Day, F. H. See (tie) 99%. 1st on First Day, L. H. Reid (tie) 99%. 2nd in Preliminary Handicap, Wm. Veach (tie) 97 out of 100. 3rd in Grand American, M. Arle (tie) 97 out of 100. In the Consolation—2 scores of 98, 5 of 97, 4 of 96, 2 of 95, and 6 of 94.
All of which merely goes to show that Peters' Shells are **Winners.**

NEW YORK:
98 Chambers St.
T. H. KELLER, Mgr.

THE PETERS CARTRIDGE COMPANY,
CINCINNATI, OHIO

FLAT CRIMP EXPANDING ELBOWS

No. 1 No. 2 No. 3

Round Corrugated
Plain Round

Octagon
Polygon

Square "H"
Square "B"

PATENTED JUNE 4, 1895

Made of One Piece

None Genuine Without Signature

F. Dieckmann

Station B, CINCINNATI

Quick Shipments are commercial life preservers. The hardware man who gets an order for any hardware article in the morning, telegraphs in to us and can send his delivery wagon around with the goods either that afternoon or the next morning at the outside, is not going to sink in the sea of competition—not by a jugful.

While "choice of the wrong jobber" is not given by Dun or Bradstreet as a cause of commercial failure, you and we both know many a hardware dealer who had to throw up his hands because his jobber was a slow shipper, or charged him so much he didn't make sufficient profits, or pressed him injudiciously for payments, causing him to make ruinous sacrifices.

Have you ever done business with Lee-Glass-Andreesen Hardware Co., Omaha, Neb. If not, you don't know the business bringing and holding power of the right kind of a jobber back of you.

McClure's Roofing Tin

Better tin at your regular price—lower price on your regular grade.

Shall we send samples and prices?.

The McClure Co.

Pittsburgh Philadelphia

NOTICE!

We have exceptional facilities for handling American products: Hardware, Sanitary, Heating and Ventilating Goods. Branches in England and Continent. References furnished. Address

EXHIBIT & TRADING CO., Main Office, 72 Henry St., Liverpool, England

SOLD THE COUNTRY OVER

TRADE MARK SCOTT'S IC EXTRA COATED. REGISTERED ROOFING TIN

MORE THAN 20 YEARS

FOLLANSBEE BROS. CO., Makers, Pittsburgh, Pa.

Tinners Find Employment

By advertising and using

THE POWERS AUTOMATIC CHIMNEY TOPS

They make chimneys draw, give Tinners employment making stocks, and give the dealers profit. Sold by Hardware Jobbers and Dealers.

Made only by **POWERS BROS.** STREATOR, ILL.

This cut free to dealers.

The "CENTENNIAL" RAIN-WATER CUT-OFF

The strongest, most durable and cheapest CUT-OFF on the market.

The only single Cut-off made to fit CORRUGATED and Plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers. Patent applied for.

Manufactured only by **COONEY & GEIGER,** 19 and 21 E. South St. INDIANAPOLIS, IND.

With our exceptional buying facilities we're able to buy galvanized sheets made to our own exacting specifications at less cost than you can buy run-of-market sheets.

Then, too, we make up Conductor Pipe and Eave Trough in very large quantities—always carrying an enormous stock on hand—and this means a saving also.

We give you the benefit—a better grade of Eave Trough and Conductor at a very attractive price.

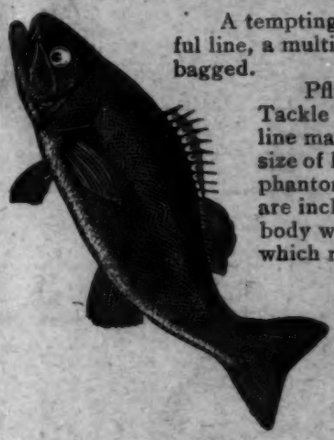
Get our quotations!

ILLINOIS ROOFING & SUPPLY CO.,
23 Lake Street, Chicago.

The Catchy Line

Pflueger's

Celebrated Fishing Tackle



A tempting bait, a strong hold, a powerful line, a multiplying reel—and the game is bagged.

Pflueger's Celebrated Fishing Tackle is easily the most extensive line manufactured. Every kind and size of hooks, flies, trolls, spinners, phantoms, reels, furnished lines, etc., are included—everything which anybody would want and many things of which most people have never heard.

We have the largest manufacturing facilities of this nature in the country.

NOTICE—Free to any Dealer in Sporting Goods, sent express prepaid, 155-page illustrated Catalogue No. F23, Metal Fish Sign and Window Transparency in 8-color Lithograph.

The Enterprise Mfg. Co.

AKRON, OHIO

OSGOOD STANDARD SCALES

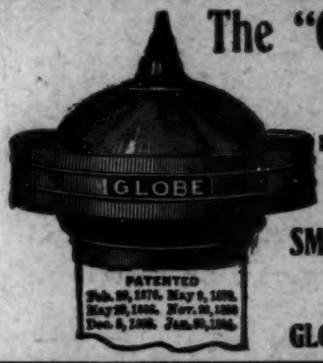
Ask your jobber about them.

Coat & Hat Hooks

The Bradley "Metal Clasp" has a stiff brace in the angle and a full rolled thread and lower hook will spring and not deface wall.

ATLAS MFG. CO., New Haven, Conn., U.S.A.

The "GLOBE" Ventilator



In BRASS, COPPER, GALVANIZED IRON, and with Glass Tops for Skylight purposes.

For Perfectly Ventilating Schools, Churches, Halls, Mills, Factories and Audience Rooms of Every Character.

SMOKY CHIMNEYS CURED.

"GLOBE" Ventilated Ridges. Send for Pamphlet.

Manufactured by

GLOBE VENTILATOR CO., Troy, N.Y.

Your Responsibility

in the relation of seller to user is an important one. Your customer is probably your neighbor and friend and he looks to you for goods that are right. He expects you to give him his money's worth. When you handle the **Atkins Celebrated Silver Steel Saws** you feel secure in the knowledge that you are selling the finest goods it is possible to obtain in the saw line. Are you selling them?. If not, NOW is a good time to make a change for the better.

WRITE FOR CATALOG AND DISCOUNTS.

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